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Desert

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When you wear jewelry set with TITANIA. After years of experiments, synthetic Rutile is now available in facet cut brilliants. This magnificent substance has been given the name of "TITANIA."

When viewed under proper lighting, round brilliants of TITANIA appear to be polished bits of rainbows. Certain remarkable optical properties make this extreme refraction of light possible.

HERE ARE THE FACTS

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RUBY, SAPPHIRE	1.760 - 1.768	.018
DIAMOND	2.417	.063
TITANIA	2.605 - 2.901	.300 (APPROX.)

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DESERT CALENDAR

- May 1—Feast day and spring corn dance, San Felipe pueblo, New Mexico.
- May 1-7—Palo Verde Festival, Tucson, Arizona.
- May 1-15—Joshua trees in Joshua Tree National Monument, reached through Twentynine Palms, California, will be in bloom.
- May 1-19—Special exhibition of Hopi Kachinas, with publications relating thereto. At Southwest Museum, Highland Park, Los Angeles.
- May 3-5—Annual Las Damas ride, Wickenburg, Arizona.
- May 3-8—Cinco de Mayo celebration at Tucson, Arizona, Nogales, Arizona, and Nogales, Mexico. Fiestas de Mayo and La Fiesta de Las Flores.
- May 4-5—Little Theater of Taos, New Mexico, presents "The Petrified Forest."
- May 5-7—Annual spring Quarter Horse show, Sonoita, Arizona.
- May 6—Annual Fish Fry, Sportsmen's Club, Palm Springs, California.
- May 6-7—Annual rock, mineral and gem show, Yermo, California.
- May 6-7—Final performances of Ramona Outdoor Play, in Ramona bowl, near Hemet, California.
- May 6-7—Sierra Club trip to Afton Canyon, Menagerie and Pastel Canyons near Cave Mountain on Mojave desert. Overnight camp near Mojave River.
- May 6-28—24th Annual Julian Wildflower show. Nearly 2000 varieties of wild blooms to be displayed in Julian Community Hall. At Julian, mountain community 60 miles northeast of San Diego, California. Mrs. Myrtle Botts, chairman.
- May 7—Apple Blossom Festival, Farmington, New Mexico.
- May 7—Public pilgrimage to old Spanish homes dating back 100 years. Mesilla, New Mexico.
- May 11-14—Annual Helldorado: parade, rodeo, whisker contest, kangaroo court, dancing, horse races. Las Vegas, Nevada.
- May 13—Founders day at Chandler, Arizona, featuring competition among 17 different tribes from the Pima, Maricopa and Gila River Indian reservations.
- May 15—Eagle, rain and Kiowa dances, Santa Clara pueblo, New Mexico.
- May 19-20-21—Annual Calico Days Rodeo and celebration, Yermo, California.
- May 19-20-21—Celebration marking 50th anniversary of discovery of Tonopah, Nevada. Three days of Wild West mining camp celebration.
- May 24-27—Utah State Industrial Council, Ogden, Utah.
- May 28—Fiesta of San Felipe de Neri, held in Old Town plaza, Albuquerque, New Mexico.
- May 29-31—Sixth annual convention, New Mexico Association of Home Extension Clubs, at New Mexico Western College, Silver City. Tours to Chino Mines Copper pit and to smelter and mill at Hurley.



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The Desert Magazine is published monthly by the Desert Press, Inc., Palm Desert, California. Re-entered as second class matter July 17, 1948, at the post office at Palm Desert, California, under the Act of March 3, 1879. Title registered No. 358865 in U. S. Patent Office, and contents copyrighted 1950 by the Desert Press, Inc. Permission to reproduce contents must be secured from the editor in writing.

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Unsolicited manuscripts and photographs submitted cannot be returned or acknowledged unless full return postage is enclosed. Desert Magazine assumes no responsibility for damage or loss of manuscripts or photographs although due care will be exercised. Subscribers should send notice of change of address by the first of the month preceeding issue.

SUBSCRIPTION RATES
One Year.....\$3.50 Two Years.....\$6.00
Canadian Subscriptions 25c Extra, Foreign 50c Extra
Subscription to Army Personnel Outside U. S. A. Must Be Mailed in Conformity With
P. O. D. Order No. 19687
Address Correspondence to Desert Magazine, Palm Desert, California



MISFITS

By GLADYS L. SAVAGE
Denver, Colorado

Yucca, blooming in a crowded city garden,
With white bells drooping in the rain,
Your once proud blades hang limp and
broken,
Sodden with pain
Of your surroundings.

Are you dreaming now of desert sand,
With a cactus by your side,
Hot winds rasping through your blades,
Singing high with pride?

Singing songs of wagon trains,
Of gold and cattle kings,
And bands of horses running,
Instead of little things?
Little men who ponder
Little thoughts within each head,
And are content to wander
Over paths that others tread?

Flower of the desert,
You are homesick
For that hot and lonely land,
Yucca, please believe me,
When I say
I know and understand.

DRY SKY

By MRS. RUTH LEVIE
Los Angeles, California

The dust winds blow,
And the tumbleweeds go
A-hurrying, scurrying by.
But when the storm passes,
There's nothing surpasses
Those white clouds and indigo sky!

On Light

By TANYA SOUTH

Then seek not ease and luxury,
But rather seek to try and see
The worth in every phase. For strife
And grief, and struggle, and desire
Without fulfillment can make life
A sacred, spiritual fire,
And bring to us a greater goal
Than any merely worldly role.

Let life be what it is. Or pain,
Or grief, or wealth and ease and love,
All can be useful to attain
Light from above.

The Cottonwood

By CYNTHIA STRATHMANN
Claremont, California

Lord, I would be
Like this tree
When life burns parched and sterile as the
sand.
That my shade
Might be made
A promise and a blessing in a land
Where hate, fear, doubt
Like drought
Have laid their blistering hand.
Thus green to grow
Only to show
What rivers flow at thy command.
That seeking sheltering leaf,
Men find thy source beneath;
And finding, drink, and understand.

DESERT HOUR GLASS

By RUBY CLEMENS SHAFT
Arlington, California

I wonder if you still remember
That wasted desert land
And you and I at twilight,
Our footprints in the sand.

I often look when passing
It seems they must be there;
With purple shadows shielding them
On sand dunes smooth and bare.

But desert winds blow swiftly
From dark until the dawn,
And through the hour glass of time
I find our footprints gone.

GREASEWOOD IN RAIN

By PHYLLIS J. BAILEY
Twentynine Palms, California

I like to smell the greasewood in a desert
rain,
And see all its tiny dusty leaves washed
shining green again.
It may not be a useful shrub, as to beauty
rather plain;
But earns its right to being, with its per-
fume after rain.

Some praise the piney fragrance of stately
trees and tall.
Sing of sweet scent of new-mown hay, or
of burning leaves in fall.
I concede the truth there be in much of
what they claim:
But I like to smell the greasewood in a
desert rain.

DESERT

By ELLA ELIZABETH PRESTON
Davenport, Iowa

This pebbled floor lay once beneath a sea
Which thundered to the mute and staring
sky.
Long lost that sea and gone the gull's
shrill cry.
Forever lost the cold waves' symphony.
When darkness falls the sharp spiked Joshua
tree
Leans on the listless breeze which loiters by,
Ushering the night, while from the mesa
high
The lengthening shadows measure immen-
sity.

Oh, fruitless plain, you yield not drink, nor
meat,
Nor shelter, nor the voice of friend to share
Wonder and grief. Your quiet everywhere
Reveals to me my loneliness complete.
Robbed of imagined stature, here I stand,
One with the nameless pebbles on the sand.

THE DESERT MAGAZINE



Aerial view of Davis Dam project. The dam is left center, blending so well with the coloring of the landscape as to be difficult to recognize. The spillway on the right is now being plugged with cement logs. Power plant is to the left of the gates. Lower cofferdam will be removed as soon as structure is completed.

They're Closing the Gates at Davis Dam

By RANDALL HENDERSON

Photographs, courtesy U. S. Reclamation Service

Map by Norton Allen

Completion of Davis Dam will mean many things to many people. To users of electricity in Arizona, California and Nevada it will mean more hydro-electric energy. To farmers on the irrigated lands below the dam it will mean a better regulation of their water supply. To sportsmen it will add a new 65-mile lake for boating and fishing. For those who like to follow the desert trails the new roads to and across Davis Dam already have opened up new scenic and mineralized areas for camping and exploration. Here is the story of the sixth and latest dam to be constructed in the lower Colorado River.

ON THE afternoon of January 9 this year I stood with a little group of engineers and spectators and watched a huge mobile crane slowly lower into place the first of 180 concrete stop logs which had been built to close the gates in the Colorado River's newest project—Davis Dam.

The closure is still in progress as this is written—and as the 2x2x13-foot logs of cement, each weighing six tons, are dropped into slots in the spillway sidewalls, the waters behind the dam are rising until eventually they will form a new reservoir extending 65 miles upstream. Since Davis Dam is only 67 miles below Hoover Dam the headwaters of the new lake will meet the tailrace two miles below the Hoover structure.

Hoover Dam, its white cement slab rising 726 feet between the precipitous dark-stained walls of Black Canyon, is a spectacular giant, well known as

the highest dam in the world. Probably it is also the most photographed dam in the world for the majesty and coloring of its setting have made it very popular with photographers.

By comparison, Davis Dam is just a dwarf—an ugly duckling of the dam family. It rises only 138 feet above the floor of the river and is constructed of earth and country rock. Its color blends so perfectly with the surrounding landscape visitors generally are disappointed when they get their first glimpse of it.

But despite its lack of glamor, Davis Dam fills a very important role in the Reclamation Service's over-all plan for the control and development of the lower Colorado River.

Work was started on the \$115,000,000 project in March 1946. The engineers selected a site known as Pyramid Canyon, between the Dead Mountain range in Nevada and the Black

Mountains in Arizona. The country rock here is brown gneiss. In places it is highly mineralized.

An earth and rock-fill structure was specified for reasons of economy. To build a concrete dam, it would have been necessary to excavate 200 feet below the floor of the river to reach bedrock. In building a dam from unprocessed local materials it was necessary to go down only 62 feet. The base of the structure is 1400 feet wide. The crown is 50 feet, carrying a roadway which will serve as a new bridge between Arizona and Nevada. Kingman, 31 miles away by oiled road, is the nearest Arizona town. Searchlight, about the same distance on the Nevada side, also is connected by paved road. The length of the dam is 1600 feet.

The construction work is being done as a joint venture in which 11 major contractors are participating, with Utah Construction company as the sponsor-

ing organization. The other contracting companies are: Morrison-Knudsen Co., Pacific Bridge Co., General Construction Co., K. & E. Corporation, Winston Bros. Co., Henry J. Kaiser Co., J. H. Pomeroy & Co., Raymond Concrete Pile Co., The Kaiser Co., and Kaiser Engineers, Inc.

H. F. Bahmeier is construction engineer for the Reclamation Service and Henry E. Williams is project manager for the contractors.

Before work could be started on the dam it was necessary to blast out a diversion channel on the Arizona side to carry the entire flow of the stream. A great cement gate in this diversion channel serves as a permanent spillway for the dam. Behind this is a forebay where are located the intakes for the power plant.

As soon as the river was diverted cofferdams were installed both above and below the dam site and excavation

The Reclamation Service built this town just below the dam on the Arizona side of the river for its employees. After the dam is completed the houses will be occupied by maintenance employees. The postoffice, named Davis Dam, is across the river on the Nevada side.



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Seven Dams and A Rock Weir

The numbers on the map and the text below indicate the chronological order in which the lower Colorado River dams were constructed.

2—HOOVER (Boulder) Dam—Construction started in 1931; completed in 1936. Height is 726.4 feet, length of crest 1244 feet. Length of Lake Mead behind dam 115 miles. Storage capacity 32,359,000 acre feet of water. Power-plant capacity 1,835,000 horsepower. Built for storage, flood control and power development.

6—DAVIS Dam—Construction started in April, 1946. Scheduled for completion in 1951. Height is 200 feet, length of crest 1600 feet. Length of reservoir behind dam 65 miles. Storage capacity 1,820,000 acre feet. Power-plant capacity 311,000 horsepower. Lake has not yet been named. Built for storage and power.

4—PARKER Dam—Construction started in June 1934; completed in August, 1938. Height 320 feet, length of crest 856 feet. Length of Lake Havasu behind dam is 45 miles. Storage capacity 716,600 acre feet. Power-plant capacity 30,000 kva. Built for storage, power and as a diversion dam for the Los Angeles Metropolitan Aqueduct.

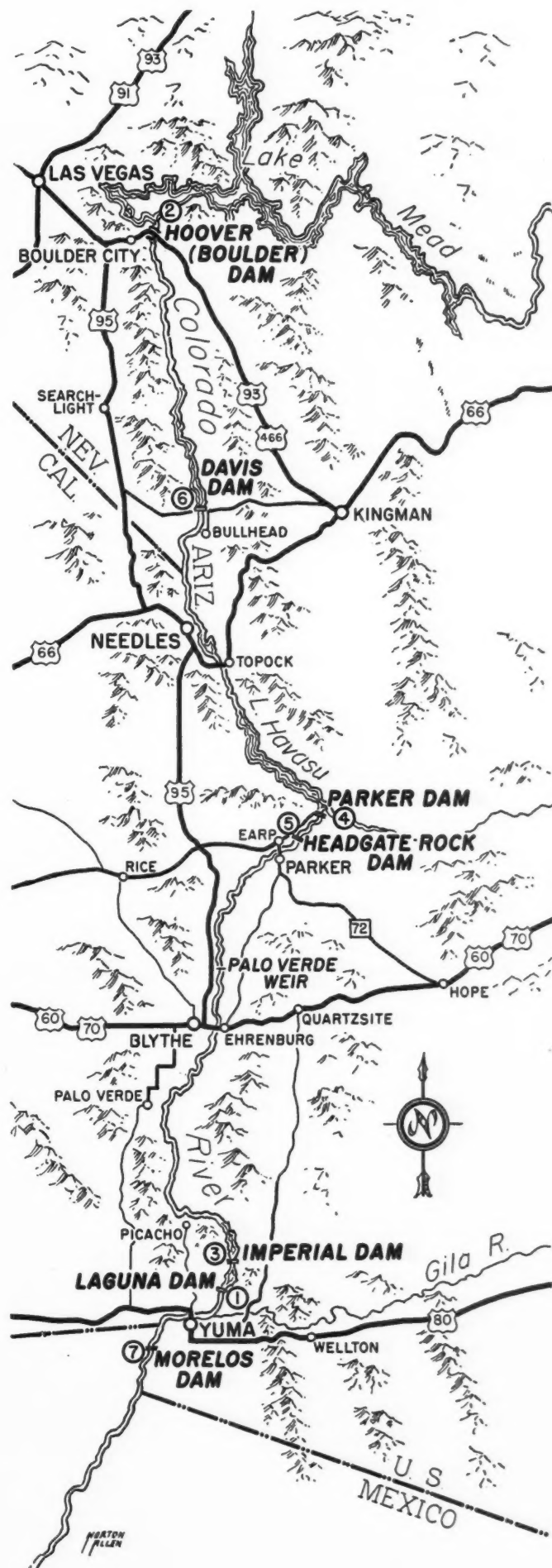
5—HEADGATE ROCK Dam—Construction started in 1938, completed in 1941. This is a diversion dam built to serve as a headgate for the irrigation of 80,000 acres of land in the Colorado River Indian Reservation below Parker, Arizona.

PALO VERDE weir—Following the completion of Hoover Dam the water in the Colorado—no longer carrying silt in solution—began scouring its channel below the dam. Palo Verde Irrigation District put in this weir just below its intake to insure continued flow of water into its canals.

3—IMPERIAL Dam—Construction started in 1936; completed in 1938. This is purely a diversion dam for the lands to be irrigated in the Imperial and Coachella valleys of California, and the Yuma and Gila valleys in Arizona.

1—First dam to be constructed on the lower Colorado River, started in 1907 and completed in 1910, as a diversion dam for the Yuma irrigation district. Since the completion of Imperial Dam the Yuma valley has been served by the newer dam.

7—MORELOS Dam—Now under construction to serve as a diversion dam for the canal system serving Mexican lands in Lower California. Scheduled to be completed by 1951.



started in preparation for the bringing in of 3,800,000 cubic yards of clay and rock for the embankment. Actual construction of the dam fill was started in September, 1948, and 10 months later it was completed.

The contractors established their camp with dormitories and a huge mess hall on the Nevada side, where there is a postoffice named Davis Dam. The Reclamation Service erected a neat village with cottage housing for its employees on the Arizona side. Two miles downstream on the Arizona side is the off-the-reservation community of Bullhead City with its own postoffice.

The name Bullhead or Bullshead—both spellings are used—came from a rock formation near the damsite which is said to resemble a bull's head. I failed to find anyone who could point out this landmark. Originally the project was called Bullshead, but in 1941 it was renamed in honor of Arthur Powell Davis who served as director of the Reclamation Service from 1914 to 1923 and helped lay the foundation for the development of the Colorado River.

The new lake has not yet been named. Some of the local people want to call it Lake Mojave for the Indian tribesmen whose reservation is downstream in the Mojave valley. The name Lake Powell, honoring the memory of John Wesley Powell, famous explorer of Grand Canyon, also is favored.

In the construction of the dam the core was built of packed clay, brought from pits three miles away. Over this was placed fine gravel, and the top and sides completed with heavy rock. It is believed that the structure is as stable and permanent as a concrete dam.

Why was it necessary to build this smaller dam so close below the great Hoover structure? What is its purpose and how does it fit into the general reclamation plan for the Southwest? These and many other questions I asked Harold Dean, progress control engineer on the project, as he escorted me over the nearly completed work in January.

His answers revealed a close relationship between the two dams. To explain Davis Dam, it is necessary to understand the functions of Hoover Dam. (Local people still refer to it as Boulder Dam.)

The Hoover project is the source of tremendous electrical power for southwestern homes and farms and factories — 1,835,000 horsepower when fully developed. There is little seasonal variation in the need for power. Consequently it is necessary to keep a constant flow of water through the penstocks which feed the great power turbines.

But Hoover Dam also is a headgate for the irrigation of nearly a million acres of land along the lower Colorado. There is a wide seasonal fluctuation in the demand for irrigation water. A constant flow of water through the gates of Hoover Dam to maintain a steady output of power results in great wastage of water from an irrigation standpoint. Colorado River water is too valuable to be wasted.

Davis Dam, then, is to provide an equalizing reservoir to insure a constant maximum of power at Hoover Dam while the farmers below are getting only the water needed for their seasonal requirements.

Davis Dam's secondary purpose is power development. It will generate 311,000 horsepower, one half of which is allotted to Arizona and one-fourth each to Nevada and California.

Construction of Davis Dam and the new roads into this area have opened a vast new interest for those who travel the desert for pleasure and recreation. In canyons of the Dead Mountains are some of the finest petroglyphs to be found in the Southwest. The region around Searchlight and on the Arizona side of the river contains many minerals which lure both prospectors and rock collectors.

The boundaries of the Lake Mead recreational area are being extended to include the new Davis Dam reservoir which means that the National Park Service will have jurisdiction over boating, fishing, wildlife preservation and the providing of facilities for vacationists and campers. The new lake will be 65 miles long and have an average width of four miles. It is expected to be no less popular than Lake Mead as a mecca for fishermen. But whereas fishermen go to Lake Mead mostly for bass, confidence is felt that the Davis Dam reservoir will become famous for its Rainbow trout.

Trout have thrived in the tailrace below the Lake Mead power plants due to the low temperatures of the water coming through the dam from the depths of the lake above. The water at this point ranges from 55 to 60 degrees. Since Davis Dam reservoir will be fed constantly by this cool water it is believed that all or the greater part of the new lake will be a trout pond.

Rainbow were planted in the stream below Hoover Dam several years ago, and evidently they have worked downstream for a considerable distance already, for the day I was at Davis Dam one of the workmen on the project boasted that he had just caught his 200th trout in the river opposite his dormitory.

Sometime in 1951 the contractors will be moving out and it is tentatively

understood that their camp will be dismantled. The Reclamation Service, however, expects to maintain its village permanently to provide housing for the maintenance and operation crew.

Many years ago I stood on a butte overlooking the Colorado River with Chester Allison who was engineer for Imperial Valley's irrigation system during the receivership days of Col. Holabird. Laguna Dam, built as a diversion embankment for the Yuma irrigation system, had just been completed.

"One of these days that river will be harnessed," Allison predicted. Allison was thinking of the great dam then being considered at Boulder Canyon. The engineer did not know how

MEXICO CENTRAL HIGHWAY SAID VIRTUALLY COMPLETE

The new Mexico Central Highway from El Paso, Texas, to Mexico City is virtually completed and is passable all the way, according to latest reports. For its entire distance the highway is black-topped, is a high-speed road most of the way. Only a few bridges remain to be finished. Horse-drawn ferries still take tourists' cars across some rivers. The new highway is not as mountainous as the Laredo-Mexico City road, passes through much territory new to most Americans.

Official opening of the new highway will be celebrated May 5, Mexico's Independence day, with a road race starting at El Paso and ending on the Guatemalan border some 2000 miles away.

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DEPARTMENT REACTIVATES U. S. INDIAN INSTITUTE

Reactivation of the National Indian Institute within the Interior Department—as a part of the Inter-American Indian Institute with headquarters in Mexico City—has been announced by Interior Secretary Oscar L. Chapman.

This means, he said, that the U. S. government will reassume its share of responsibility in efforts aimed at improving the lot of the 30 million Indians on this hemisphere. The Inter-American Indian Institute was established in 1940. The U. S. affiliate was set up in 1941.

D'Arcy McNickle has been named acting director of the Institute. He is a member of the Flathead Indian tribe of Montana, will also be a member of the Institute's policy board. He has been with the Bureau of Indian Affairs since 1933, is author of a recently published history of American Indians, *They Came Here First*.

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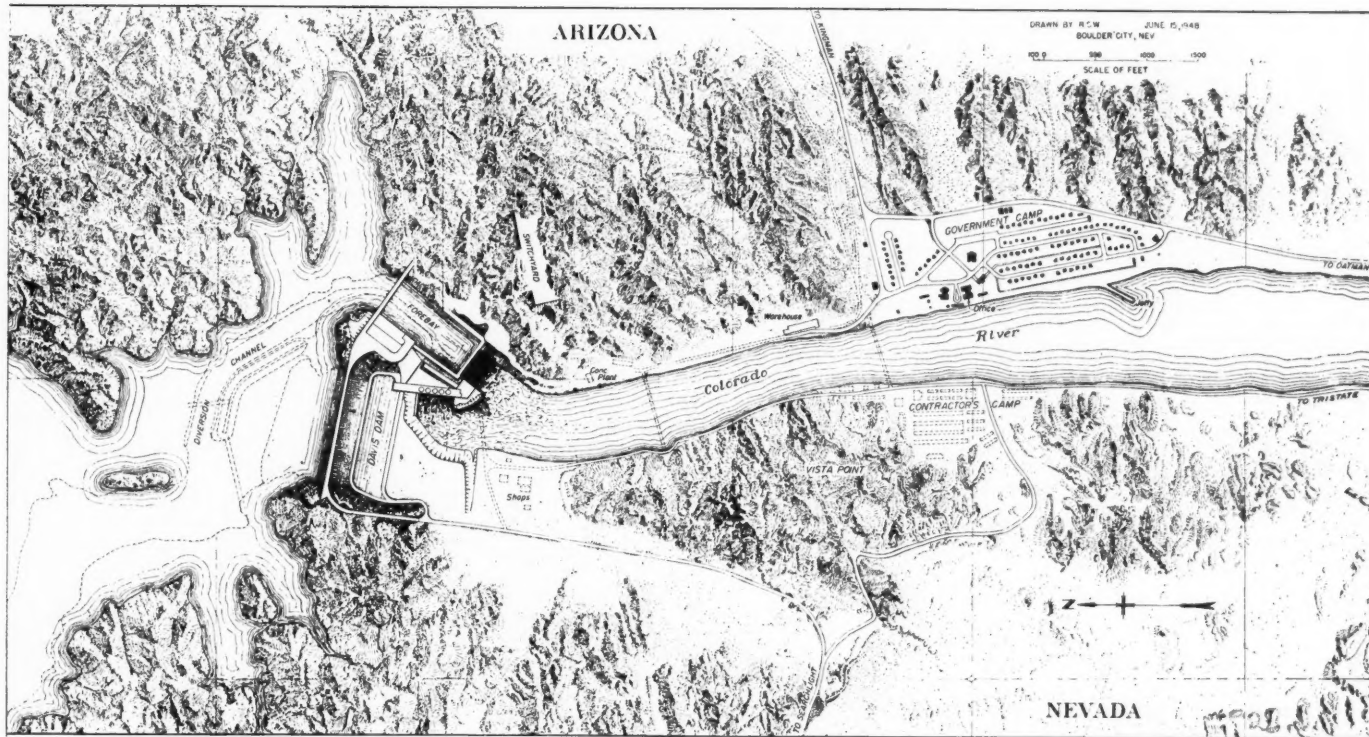
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Reclamation Service drawing showing general plan of the project.

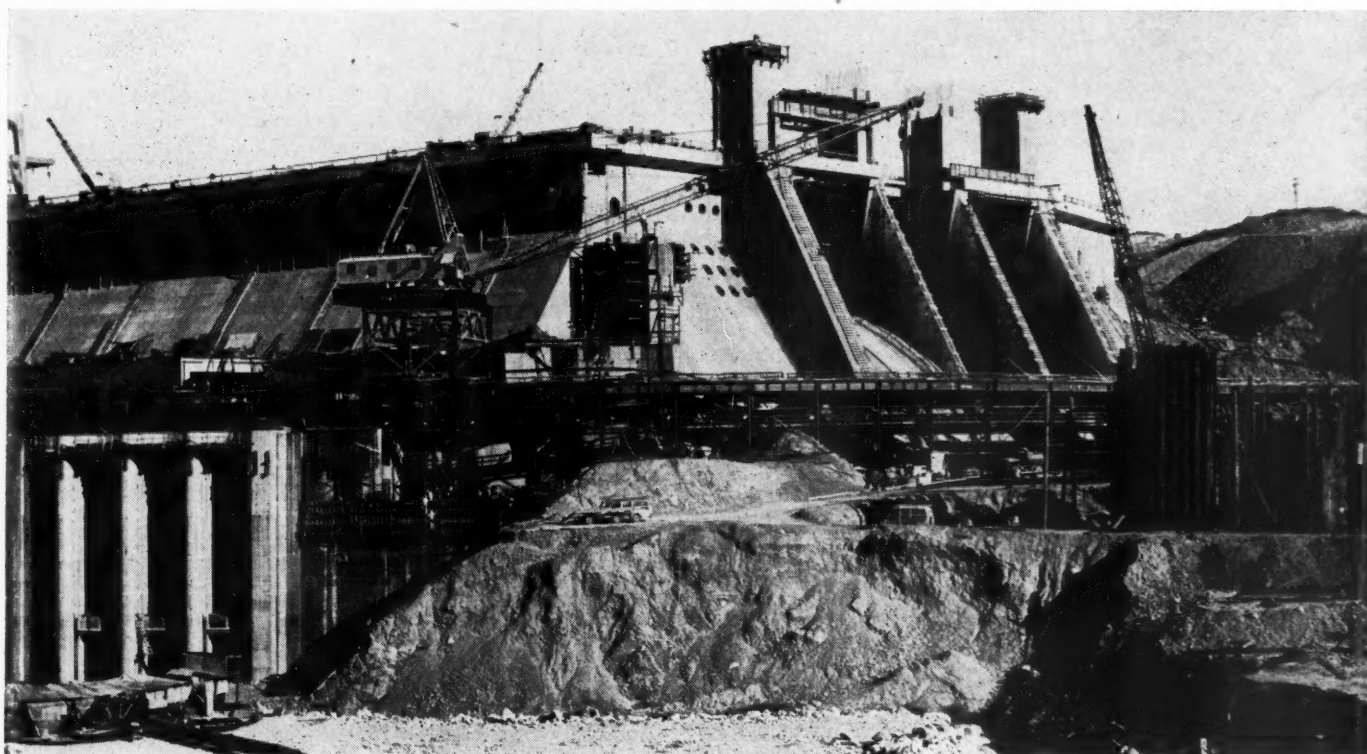
true were the words he spoke. During the 40 years since he made his prediction not only Hoover but five other dams have been built in the lower Colorado. Davis Dam is the sixth, and a seventh, Morelos dam, is now under

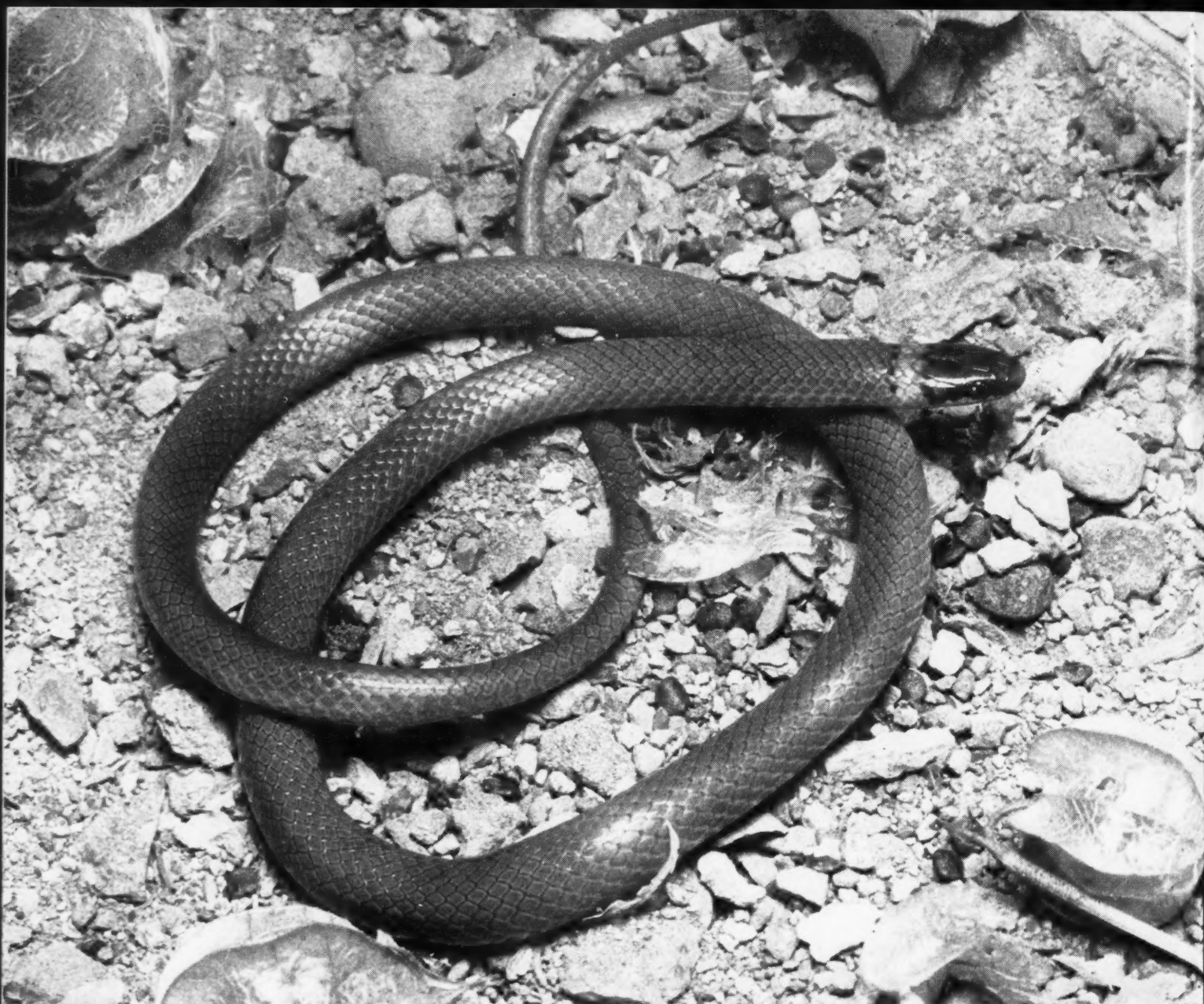
construction south of the border in Baja California.

The lower Colorado has been so completely harnessed that from Hoover Dam south it is today little more than a glorified irrigation ditch. Old-

timers along the river will be glad that the new dam in Pyramid Canyon was named in tribute to Arthur Davis—for he was a worthy pioneer in the task of laying the foundations for the development of today.

Spillway and intake structure, still under construction although the lake is now in process of being filled.





HUACHUCA MOUNTAIN BLACK-HEADED SNAKE: This tiny snake (*Tantilla wilcoxi wilcoxi*) is found in southeastern Arizona, and can be told from other species by the dotted dark line which can be seen behind the light ring at the back of the black head. They are exceedingly secretive snakes and are seldom found in the open. The best place to look for them is beneath stones and dead wood and the dried sotol plants so common on the sides of desert foothills.

Its Tiny Fangs Are Harmless . . .

By GEORGE M. BRADT

Photograph by the author

THE MOST interesting fact about the tiny black-headed snakes (Genus *Tantilla*) is their possession of grooved, poison-conducting fangs at the rear of their upper jaws. They share this distinctive characteristic with two other southwestern snakes: the lyre snakes of California, Arizona and Texas, and the Arizona Vine snake. The fact that the minute teeth of the black-headed snake are unable to draw blood from a person's hand, and that the poison possessed by the other two is apparently extremely mild, keeps these strange snakes from being in any way dangerous. In fact, only one rear-fanged snake, the boomslang of Africa, has been known to bite a human fatally.

The black-headed snake is really more worm-like than snake-like. Usually it will try to hide its head between its

captor's fingers. It seldom attains a length of more than 14 inches.

The black-headed snake's diminutive size makes one think, by contrast, of the truly amazing dimensions attained by the world's largest snakes. Imagine this little creature stretched out beside one of our own six-foot rattlers. Then try visualizing the ten-inch *Tantilla* next to a ten-foot bushmaster from Central America or an 18-foot King Cobra. If you can do this, think of it alongside the snake that holds the record length—a 23-foot reticulate python!

The food of our little black-headed snake affords another contrast. Centipedes and the larvae of insects seem to make up its principal diet. Compare this fare with that of an Indian python known to have dined on a four-foot leopard! A third comparison may be made between the one to four eggs laid by female *Tantilla* and a clutch of 100 python eggs.



The author enjoys early March sunshine between Sacaton and Casa Grande, Arizona.

We Are Desert Gypsies . . .

By BETTY WOODS
Photos by the Author

WE STOPPED our car and house-trailer at the base of a rim-rocked mesa that rose up and split the road in two. The left trail headed straight into the fanfare of a desert sunset. The wagon-rutted pathway on our right hurried into a clump of sandstone and cedar.

"Which road will it be?" asked Poncho, my writer-husband. Poncho is one of his fiction characters.

"Let's flip a nickel," I suggested. "Heads, left. Tails, right."

Tails won. That's the way we've done for years. Just let the flip of a coin decide which road we'll take. You can do that when you trailer on the desert. Fill the water tank. Pack ice in the refrigerator. Stock up with groceries. Then start hunting for adventure.

We were in Navajo country, which meant material for our stories. So now we turned up a secluded canyon peopled with human-like formations. Great pot-bellied boulders squatted on

Many people who are caught in the mesh of artificial restrictions imposed by today's high-speed living dream of being able to start out and go where they will when they will for as long as they wish. And it can be done. Here Betty Woods tells how she and her writer-husband have found the answer to this yearning by using a modern auto trailer in which they visit little-known areas of the great Southwest desert country.

the hillsides, and sandstone gnomes balanced whimsical burdens on their heads. We found a camping spot among the pinyons and pines. Soon we had a fire crackling beside the trailer even though I cook inside on the Coleman high-test gas range. A campfire invites people to stop and talk. We had just finished the last cup of coffee when we heard horses com-

ing down the canyon. Three young Navajos in black hats, purple shirts and blue jeans rode into the firelight.

"Hello," we said.

"Hello," the oldest boy answered.

"Where you from?" the youngest wanted to know.

The third boy looked past us to the trailer. I took the hint. "Would you like to see inside our rolling hogan?" He didn't answer. He just got off his horse and followed us into the trailer. We showed him everything from the medicine cabinet in the tiny bathroom to the modern gas range. Then he looked around with a very bored air.

"Pretty smooth job. Where did you buy it?"

The other two boys came in and made comments in Navajo. In English they asked, "How much did it cost?"

I made another pot of coffee while Poncho built up the fire. The three boys stretched out on the ground. Now began another of those wonderful nights on the desert. Getting to know a neighbor race better. Navajos understanding white people better. We



We like the Indian country, where Navajos often were our friendly neighbors.

told them about Indians up north and down in Mexico. They told us about school in Santa Fe and about a very smart medicine man in Toadlena. We also learned that a Fire dance would start in three days. We had always wanted to see this dance—the most spectacular of all Navajo dances.

Early the next morning I felt rather than heard someone at the door. I turned and saw a tiny young Navajo woman dressed in an orange velvet blouse and a wide green satin skirt. There are few beautiful Navajo girls, but here was one of them. The proud way she held her head. Her deep brown eyes serious, yet ready to laugh. She reminded me of what the Navajos sing, "I walk in beauty . . ." She seemed to do just that.

"Come in," I invited. We looked at each other and smiled. Suddenly

it seemed as though Charlotte and I had known each other for a long time.

"My husband told me to come see you," she said. "He was here last night."

Our talk was woman-talk. Clothes and recipes and a bit of gossip about old Pumpkin Top's young wife. Charlotte felt better in Navajo clothes. "You can't sit on the ground in a white woman's dress," she said. "And when you wear a blanket, you don't need a coat and a hat."

She told me how she preserved cactus fruits and made jams from desert berries. She told me about the herbs she gathered for seasoning mutton stew and how to make that strange Navajo bread—*nun-es-ka-day*. Then we talked of the Fire dance. It was being held a few miles beyond Window Rock.

"Get there when the sun sets," she

said. "That is the time the medicine men make the big corral."

We were at the dance ground much earlier. We knew there would be much to see. We watched the medicine men sprinkle corn meal in a wide circle around a huge pile of logs. Then young Navajos seized fresh pinyon boughs from a nearby stack and laid them four feet high on the corn meal circle. Quickly the great enclosure was finished. Hundreds of Indians quietly moved in. With blankets and coffee pots each family picked a spot to build a fire and spend the night.

We shared our fire with Charlotte and her husband and watched the dozens of other little fires busily cooking Indian suppers. You could smell mutton sizzling and coffee boiling and green corn roasting. You had a feeling of comfort and abundance here in this spectacle of ceremony and color. At last the Navajos lit the log pile. The naked white-painted dancers began their weird all-night ritual.

At daylight we went back to the trailer sleepy and dusty and full of bewildered wonder at what we had seen. After the Fire dance my husband needed a ghost town setting for a piece of fiction he was writing. So we headed for Coal Basin.

But first we stopped in Gallup to get ice, non-perishable groceries and to fill the trailer's built-in water tank and the extra 10-gallon water cans. We carry these cans for additional water when campsites aren't near wells or springs. We also find these containers convenient for hauling and heating water for baths. Since story interest in the locale comes first with us, we make camp at an interesting spot, regardless of modern comforts. We drive out from it to further see and enjoy the desert.

We don't mind what might seem inconveniences for we can adjust ourselves to most situations. What if we do have to heat the bath water in those ten-gallon cans on the Coleman range? There's a bath tub built in under one of the dinette seats that in other times serves as a storage space for bedding. That range heats the trailer, too. An extra heating unit would mean extra weight.

We do without electricity and use kerosene lamps. We like the small, squat type because it doesn't tip easily. Most portable light plants are too heavy for rugged trailer travel. Keeping the load's weight down is important for desert travel. We carry only a few well-chosen, wrinkle-proof clothes. We have only a few housekeeping utensils, but those are used for many purposes. I use a medium-sized wire strainer for a flour sifter, colander and

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dish cover. This stripping down to bare necessities makes gypsying simple and a lot of fun. Deliberately we avoid city trailer camps with their modern conveniences and their packed-in parking areas.

We knew the road to remote Coal Basin would be rutted, so we got the trailer ready for rough travel. We packed the ice box so milk and foods wouldn't spill. As an extra precaution we tied the refrigerator doors tight together. Once, before we learned this trick, we found a hundred pounds of ice scooting up and down the whole length of the trailer after a bumpy trip. In the cupboards I laid tea towels on the plastic dishes to keep them from moving about. However, there is never too much preparation for travel because everything fits in its place. We find cabinet drawers the best place for ink and anything else that might tip over.

Poncho learned it was important to keep a well-balanced load, so the heaviest articles such as books and typewriters go in the center of the trailer. He never allows too much weight at the hitch end. That would mean trouble for the rear end of the car.

Rough roads never keep us from going where we want to. Poncho knows how to ease the car over places without too much wear and tear. However, we do try to avoid mud and sand. If a road looks threatening Poncho gets out and inspects it for sand or bog holes.

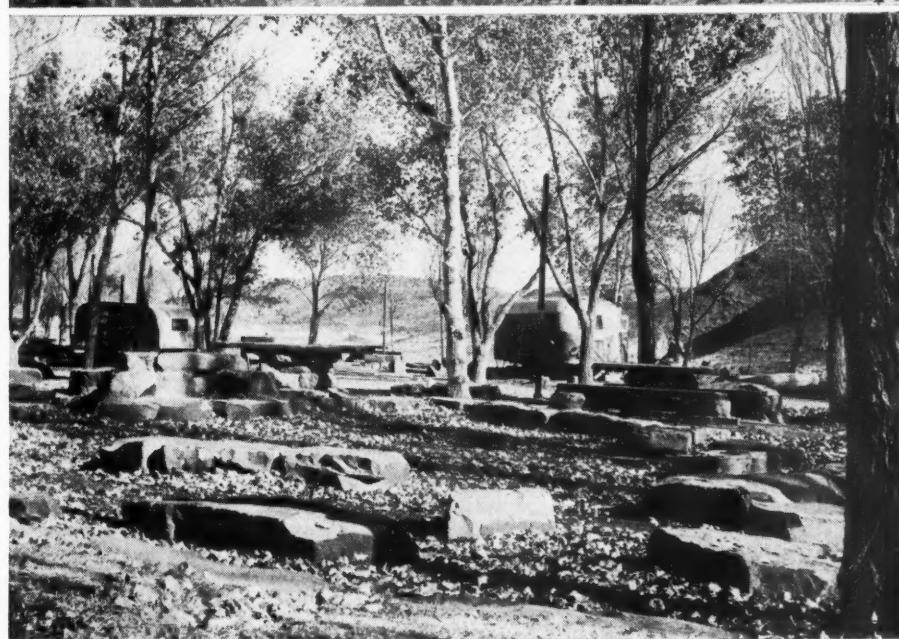
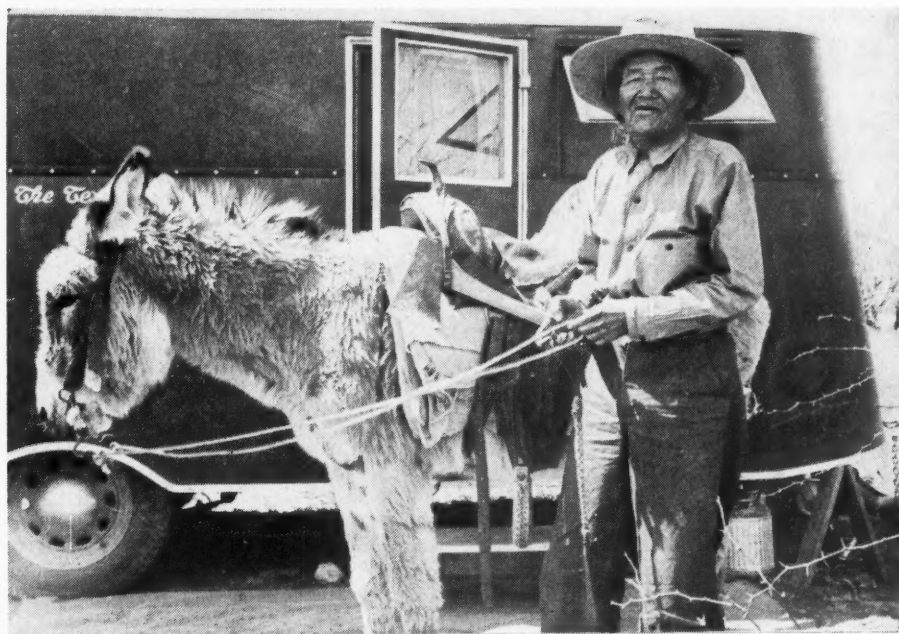
We found Coal Basin hidden behind a mass of rimrock cliffs several miles northwest of Gallup. We also found old Buss, the town's colored caretaker from whom we got permission to camp. We always first get permission to stay if the spot is on private property. And if we stop any length of time on an Indian reservation, we go to the agent for a permit.

This was once an active coal producing camp. Then flowers grew in the yards and smoke curled out of chimneys. Now the only moving thing was a great tin smokestack swinging and

Above—Near Bylas, Arizona, Andy—old Apache scout—stopped by our trailer for lunch. He was on his way to cut mesquite wood.

Center—At Manzano, New Mexico, the Woods camped for a month on a pit-house ruin. Here the author's husband finds an arrow sharpener in ruins.

Below—Pleasant campgrounds. Elephant Butte, New Mexico.



complaining in the wind. The empty streets were hummocked on both sides with weathered-down adobe walls. A few fences stood to protect phantom houses with steps leading to nowhere.

We parked the trailer beside one of these houseless sand-choked yards. We explored the few remaining houses and wondered about the people who had lived in them. Who were they? Where were they now? What they had left behind told us a little about them. Abandoned magazines and empty flower pots, cheesecake art and an old man's cane.

I liked the friendly loneliness of the wind as it whispered through the sage and cedar. "But this ain't no ghost town," denied Buss, the colored caretaker. "This town's too lonesome for ghosts."

While we were ghost-towning Poncho decided to trailer over to another kind of deserted city. This place lay on Putney Mesa overlooking the lava beds southeast of Grants. It was a large, four-hundred-room pueblo with walls of excellent masonry. The former occupants, too, left story-telling things behind. Turquoise beads, metates and manos and pottery. And we could guess who these people were. Acomas and Lagunas whose descendants now live in those two modern pueblos not far away. Pinyon, sage and chamiso grow in rooms and in the big rectangular plaza.

Below this prehistoric ghost town is that awesome sea of cold black lava which humps and writhes its way for 60 miles to the south and west. In the lava caves you find beautifully decorated ollas and other artifacts that were hidden possibly in hurried flight. Even today these fantastic and mysterious lava beds are waiting to be "discovered" by a professional archeologist.

In Grants we heard about a colorful desert character, a horse thief, who lived over in Rodeo, on the New Mexico-Arizona border. To Albuquerque and down the Rio Grande we went. To Hatch, Deming and Lordsburg. The country from Deming to the Mexican border and west to the Arizona line is a vast cactus garden. Nowhere in New Mexico is the desert so packed with cholla, prickly pear, ocotillo and yucca, devil's claw and Christ's thorn, barrel cactus, century plant and a dozen others. And the mountains! Carved out of great rough masses of color.

Rodeo sprawled at the foot of a magnificent mountain range—the Chiricahuas. It was in these mountains that Cochise and his band hid to harass the U. S. army for so long. Here, too, other outlaws disappeared when posses got too close. In this story-making background we pulled up to make camp on the edge of Rodeo.

After a few discreet questions we located our horse thief. This flesh-and-blood outlaw made fiction characters seem rather trite. I had expected to find a tough, hard-oathed individual. Instead he was a mild-mannered gentleman—utterly disarming. Only his eyes showed a defiant spirit.

We had many visitors here. One morning the screen door suddenly was pushed open. A long gray face topped with two huge ears poked itself in the doorway. If I hadn't stopped him, a burro would have walked right into the trailer. To ease his hurt feelings I gave him some bread. This was a mistake. He deserted the townspeople who gave him handouts and took up with us. Besides being a panhandler, he was a Peeping Tom. He liked to stand at the trailer windows and gaze in at us.

The Chiricahua country is real trailer country. Cave Creek with its brilliant and sculptured arches and cool rushing water. Curious deer wander close to campsites. And one day we were lucky enough to see a herd of javelina.

The animals of the desert have given us a lot of fun. Take that night in the land of basket-woven houses on the Papago reservation. A big round moon came rolling up in the east. We sat outside to watch it silver the saguaro and cholla and ocotillo around the trailer. A lone coyote began his yipping serenade. Soon other coyotes joined the lonesome one. Then Poncho gave a very real imitation of a coyote. From a far-off mesa came a wild reply. Again Poncho imitated our howling neighbors. The nearby pack answered. A third pack took up the talk. We were laughing hard now, for we had coyotes howling in every direction.

And then there was Liz. Liz was a small bob-tailed lizard who hung around and waited for us to kill flies for her. She had another amusing trait that pleased the children of our Papago friends. She liked to have her chin scratched. When I'd take a stick and scratch her chin she'd lift her tiny, dragon-like head in enjoyment. The youngsters would laugh and laugh, but Liz didn't care.

Frances, a Pima friend, told us about John Rope and Old Andy, two Apache scouts who were with our army hunting Geronimo. Frances made them sound so rich in living history that we hooked up and headed for the White Mountain Apaches. We parked beside a trading post at Bylas, and in a few hours the trailer was full of Indians.

John Rope was a dignified old gentleman whose dark red face seemed remarkably young for the decades of warring and pursuit he had seen. He

told us the Apache's side of treaty making and breaking. Of who were good leaders and who were bad, both red and white. John Rope was wise and tolerant and understanding and wore the biggest silver whisker puller on the reservation.

But old Andy was a clown. He was little and wrinkled and full of fun even at 80. He and his burro always showed up at mealtime. If I was slow in starting a meal, he'd turn to me and say, "Go head. Cook." Andy spent hours looking through our magazines hunting for "leg art." Whenever he'd come across a picture of a girl, he'd point and exclaim, "Oooo, pretty girl!"

Andy's women relatives joined the other Apache women in a mesquite thicket where they met for a daily gambling session. One afternoon his niece stopped in on her way to the game.

"You come with me," she pointed with her lips in the direction of the mesquite. "You play fan-tan with us." She eyed my red dress with envious contemplation.

"I don't have time today," I told her. "I don't know how to play fan-tan, either."

"We show you," she said, still eyeing my dress.

"Another time, maybe."

"Then you lend me two dollars?"

"How about selling me that old water jug you were carrying yesterday?"

She thought a minute. "All right." She sent her little boy to get the old basket-woven jug.

While we waited to complete the deal she asked, "You going to Stone Lake?"

"No. Where's that?"

"With the Jicarillas at Dulce. We go there to trade our baskets on September 15th. All Indians go there to trade."

By the time the child was back with the jug and the deal was finished we were planning to go to Stone Lake over in New Mexico.

There we unhitched the trailer among old-time Ute teepees and modern army tents on the shores of Stone Lake. We watched the Jemez bring in fruit from the Rio Grande. We heard Navajos haggle with Domingos over the price of jewelry. Everywhere Indians traded with Indians in their quiet way. For three days there was feasting and dancing according to ancient custom. Races and a rodeo. And a huge round dance at night.

On our second visit there Poncho was taken into the brush kiva and made a member of the Ollero clan. So, each year we go back and stay with his clan during the three-day ceremony.

But Indian reservations and ghost

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Jicarilla Apache girls quietly watch gathering of their tribe for annual fiesta. We came early, parked our trailer in the encampment in a site of our choice. (Over white foreground tent, right.)

towns aren't the only places we've enjoyed trailering to on the desert. Tucked back in a mountain valley of New Mexico are the Cities That Died of Fear, a little chain of native settlements whose names are musical and bewildering to spell. Early Spanish ways of life still go on in Chilili, Tajique, Torreon and Manzano, four of the living legendary cities. The other three, Abo, Gran Quivira and Quarri have only the dead ruins of mission churches to show where padres worked to bring a new God to the pueblo Indians. These seven villages were once the homes of the Tigua Indians who farmed the rich valley fields. But the Apaches raided the villages, one by one. Fear caused the people to abandon their homes and flee to other New Mexico pueblos. Later, some of them returned to resettle the towns, many of which big-name explorers of the 16th and 17th centuries mention in their chronicles.

We found old and picturesque Manzano, the place of the ancient apple orchards, the most fascinating. It lies

in the low, cedar-furred hills of the Manzano mountains. Here the adobe houses wear their narrow porches like balconies which open into flower-filled patios. Carved deep-set doors and corner fireplaces tell you change is not welcome here.

With water from Manzano's creek-size spring the people cultivate abundant corn and bean crops. It waters, too, the apple orchards the padres are said to have planted 200 years ago.

On fall days we watched families thresh beans in clean-swept yards. Many of the people here use the old method of threshing—that of riding a horse over the pods to tramp out the frijoles. This tedious way of winter preparation goes well with the gentle and courteous manner of life here. Manzanoans live close to the soil and close to the church. A mellow-toned mission bell marks their time of day, morning, noon and night—many more times on saint's days and Sundays. It was during the pinyon harvest that this bell became important to us. Every sunset we'd wait for its

last melancholy notes to drift away. Then out of canyons and deep arroyos came whole families and their pinyon loaded burros. Everybody—grownups and children—carried bulging nut-filled sacks. It was like the satisfactory ending of a play—a kind of humble pageantry with harvesters going home. And soon the odor of pinyons roasting hung over the village like incense at an altar.

We like dropping back to the old Spanish ways of these kind people. To share a marriage letter. To attend a christening or a gran baile.

We think our trailer life on the desert is one of the richest experiences we can ever have. Just to marvel at its wonders all the way from Chihuahua up to where it stops and cools off in Colorado. The Salton Sea and New Mexico's White Sands. The Papago's primitive Rabbit-Ear country. The Mojaves and their desert. Old towns like Ft. Sumner, Lincoln and Trampas. These places and a mapful more help us to know and understand the desert's people, its bigness and its freeness.

Swampers' Gold . . .

By JAY ELLIS RANSOM

LA TE afternoon lay shimmering over the desert. All day the sun had sweated the backs of mules and skimmers as they hauled the freight wagons out of Mexico toward the City of Angels. They had come up from Sonora and Chihuahua, plodding along day after day as they had been doing for Charlie Brooks for longer than some of the swampers wanted to remember.

The Vallecito desert lay several days ahead, and the great sink that is now the Salton Sea. Yuma lay east, or

north, and weeks back they had passed through Nogales. Charlie Brooks considered his freighting a profitable business, but tough on a man.

Now, as the creaking wagons drew near their night's camp at a fresh water spring that must have been created especially for prospectors and freighters, Charlie could hear the men shouting to each other. The chuck wagon stood unhitched, gleaming white against the blackness of a high saw-toothed butte. Charlie did not know exactly where the Mexican border lay—perhaps a few miles north yet. Or

Charlie Brooks passed away in 1929, but before his death he told his granddaughter about the heavy black rocks which he and swampers of the old Chihuahua-to-Los Angeles freight wagons once threw at their mules—rocks which 40 years later were assayed as gold. Maggie Baker, the granddaughter, believes the rocks were from Pegleg Smith's long lost deposit of black nuggets. Here are new clues for the desert prospectors who have long sought the legendary Pegleg mine.

his wagons may have already crossed it. It really didn't matter.

When the last dusty wagon had groaned to a stop, the swampers unhitched the mules and turned them loose for the night. Charlie went with his men to the chuck wagon and helped himself. They ate hungrily, the way men will who are dog-tired and want only to roll up in their soogans.

A good place to camp; in fact the best water south of the sink. The butte made a fine lookout for spying strayed mules in the morning. Also, there were many heavy black throwing rocks the size of walnuts, strangely shaped. Each trip his men filled their pockets with them to heave against the laggard mules in the dreary stretch ahead. He himself had kept two of the oddest pebbles for years. No particular reason, only he liked them . . .

Had Charlie Brooks realized then, back in the '70s, that the heavy stones his swampers used to speed up their teams were actually the mysterious "rocks" known today as the Pegleg nuggets, he might have shown more interest in the location of that saw-toothed butte. But it was 40 years before a passing geologist identified the curious stones for him. Meanwhile, wagon freighting passed with the coming of railroads and highways.

Charlie Brooks is long dead. But before his passing in 1929, he had a chance to marvel at the words of the stranger who held the shiny, glazed rocks in his hand.

"You must have thrown several fortunes away," the man said glumly when Charlie finished his story.

Charlie was 92 then. The old eyes gleamed with interest. "I could find it again," he chuckled, turning toward his grown granddaughter, Maggie Jackson. "But we don't need gold now, do we Maggie?"

"I don't guess we do, Grandpa."

The year was 1928, booming high, wide and fancy.

Then, a few months before Wall

Maggie Baker—her grandfather threw gold nuggets at the mules that pulled the freight wagons across the desert.



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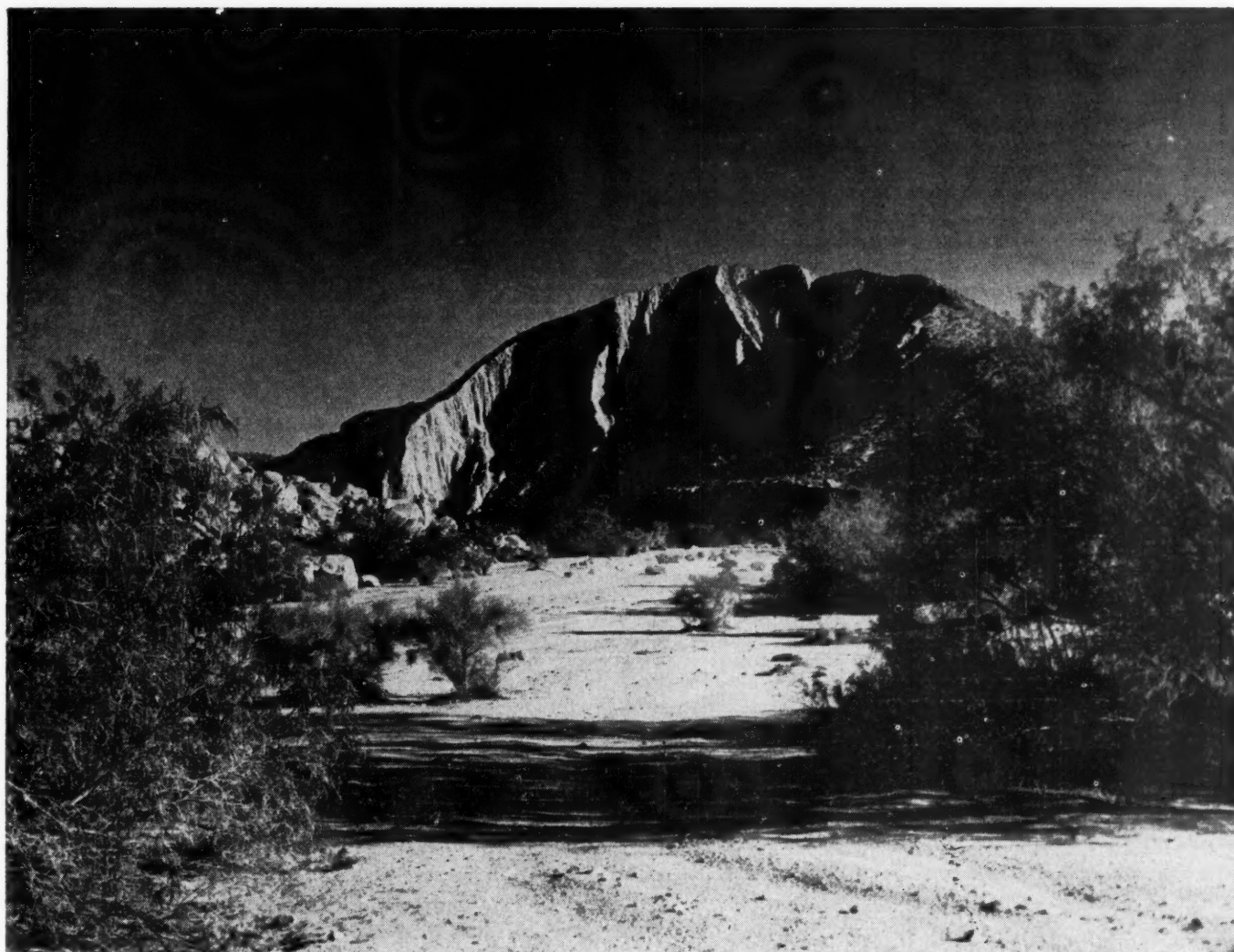
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Pinyon Mountains, one of the most conspicuous of the buttes along the old Butterfield stage route in southern California—the route where Maggie Baker's search for the Lost Pegleg gold will be centered.

Street's frenzy wiped out Maggie's fortune in beef, Charlie Brooks decided to take his granddaughter on one last jaunt over the freight trails he'd followed across the raw desert in his youth. Many of the old routes were lost entirely, covered by the windblown debris of the desert. Others, mere rutted tracks through mesquite and greasewood, were kept open by ranchers and Mexican shepherders. One or two had become paved highways along which motorists hummed at a speed that covered in an hour what had taken his jerkline teams a week.

It was from a graded highway, that summer of 1929, that old Charlie pointed out the Pegleg butte to Maggie. It stood 9 or 10 miles distant, but his keen blue eyes made out every detail as he described it to her. "We used to camp at its base every trip," he said. "The swamper found some wonderful throwing rocks up on that butte." He chuckled. "I guess that feller that called my stones the Peg-

leg nuggets would like to be along now!"

Again the day was hot. Maggie wanted to humor her grandfather. She realized he had little time left. So she smiled, nodded her head, and let her eyes return to the highway ahead. An old man's memories rightly belonged to the past.

It wasn't until 17 years later when Henry E. W. Wilson's article, *Lost Pegleg Gold is not a Myth*, came out in the November, 1946, issue of *Desert Magazine* that Maggie (Jackson) Baker first learned of the furor over those fabulous nuggets. Her grandfather had told her about "swamper's gold." When she'd read the article through, she knew, with rising excitement, that she could go forthwith and lay her hands squarely on the Pegleg fortune.

She and her new husband, Riley Baker, were running the Badger Creek service station four miles southwest of Marble Canyon lodge on U. S. Highway 89. The depression had done

its worst. Money was still scarce. Maggie thought ruefully of those fat years when she'd been too rich in cattle to want to bother her head about a few gold nuggets and an old man's memories. Well, lucky for her, she and Riley would sally forth and stake the Pegleg gold!

That summer she and Riley explored the whole Borrego desert region and the regions east to Yuma. Before they gave up the search for lack of funds, they had made four trips without success. They searched the Salton Sea on both sides. They followed the old Butterfield stage route from Sonora to Los Angeles because it, too, had been one of Charlie's hard-won trails.

Maggie and Riley hunted both sides of the old Bradshaw road. They made sorties on every byway that might have been used for freighting. But 17 years can do a lot to a desert road.

In planning an intensive new search next year, this enterprising Arizona pioneer woman believes now that the black gold nuggets will not be found

in the Vallecito area. Except for the Butterfield stage route, none of the old jerkline trails passed that way. It is Maggie's honest opinion that the Pegleg gold will be found near Yuma, perhaps in the Chocolate Mountains, but perhaps, too, south of the International Boundary.

Charlie Brooks' usual route lay east

of Yuma along the Gila river to Agua Caliente. By either of two routes, he traveled to and from his shipping point in Chihuahua through what is now the Organ Pipe Cactus National Monument, or via Nogales. The trails ran north out of Chihuahua, turning westward both above and below the Mexican line. The country was everywhere

rough, water scarce. The area in which the black nuggets were found may be fairly large, for Charlie had said that the heavy stones were sometimes picked up along a considerable distance of trail.

Maggie has tried to determine an average day's travel made by the frontier freighters. "Some of the old timers say they made 15 miles a day," she explained. "Others brag on 30. I do know that Grandpa had to carry water in barrels on the sides of his wagons along part of the trail past the Pegleg gold. There was one night when they had to make a dry camp."

Clues to the gold-strewn trail! Maggie thinks the Borrego Springs location as mapped by Norton Allen for Wilson's article is too far west. In her own mind, she believes that Charlie showed her the butte somewhere along the lower road west of Yuma, and/or south.

"If one could find an old map showing the trails, perhaps even the old Padres' trails," she said thoughtfully, "he might track it down. Perhaps, from a modern topographic map one could study out the most likely routes the jerkline skimmers would have taken on their way up from Sonora."

In the early days Nogales was a logical crossing of the Border. The routes then were mostly just horse trails, widened here and there as heavy wagons lumbered across the desert wastes. Indians met along the way would never tell the location of any gold when they recognized it. For some reason they held the yellow metal in superstitious awe. Pegleg himself probably stumbled onto the black nuggets while searching for his own burros years before the freighters came to use his spring, and recognized them because prospecting was his business.

In any case, the existence of the gold nuggets, blackened by desert varnish, is known beyond doubt. Maggie intends to find them. She hopes to sell out her Houserock Valley carnotite claim (*Desert Magazine*, August, 1949), and plans a full scale search after Charlie's ancient trails, water-holes and camps. She is willing to share her present knowledge with readers of *Desert Magazine*, but they will have to draw their own maps and make their own deductions.

Around the Pegleg butte lies only raw desert—rough, dry, inhospitable. The ragged knob itself stands clearly visible from a modern, well-traveled road that today may be paved, squarely on an old trailway that probably crosses the modern highway in the vicinity. There, where fresh water slaked the thirst of his mules and skimmers, Charlie Brooks and his Mexican swamper camped so long ago.

Desert Quiz

Here's another lesson for Desert Magazine's monthly class in desertology. All the answers have appeared in previous issues of the magazine. They include the subjects of geography, history, mineralogy, botany, literature and the general lore of the Southwest. Twelve to 14 correct answers is fair, 15 or 16 is good, 17 or 18 is excellent. If you get more than that you are an S. D. S.—Sand Dune Sage. Answers are on page 37.

- 1—Stove Pipe wells is a historic watering place in—
Southern Nevada..... Painted Desert..... Death Valley..... On Butterfield stage route.....
- 2—Jerky, an important food item for the desert pioneer, is made by drying brine-soaked meat—
Over an open fire..... In the sun..... In an oven..... In a smoke house.....
- 3—To reach Roosevelt dam you would take—
Coronado Trail highway..... Sunkist Trail..... Apache Trail..... Broadway of America.....
- 4—The major mineral mined in the area of Gallup, New Mexico, is—
Coal..... Silver..... Lead..... Tungsten.....
- 5—Among the Navajo a *chinde* is—
A medicine man..... Tool used in making sand paintings..... Certain type of headdress..... A devil or evil spirit.....
- 6—San Xavier del Bac Mission is located near—
Santa Fe..... Tucson..... Casa Grande..... El Paso.....
- 7—The predominating minerals in granite generally are—
Malachite and azurite..... Calcite and lepidolite..... Manganese and apatite..... Quartz and feldspar.....
- 8—The book, *The Romance of the Colorado*, was written by—
Dellenbaugh..... Powell..... Kolb..... Freeman.....
- 9—Palo Verde Valley of California is irrigated by water from the—
Mojave River..... Deep wells..... The Colorado River..... Mountain reservoirs.....
- 10—*Camino* is a Spanish word in common use in the Southwest, meaning—
Oxcart..... River..... Gold mine..... Road or highway.....
- 11—The blossom of filaree is—
Purple..... White..... Red..... Yellow.....
- 12—The buttes known as The Bear's Ears are located in—
Monument Valley..... Zion National Park..... Along the road to Natural Bridges National Monument..... Tuba City, Arizona.....
- 13—According to Hopi legend the home of the Kachinas is in the—
Underworld..... Grand Canyon..... San Francisco Peaks..... The Sun.....
- 14—The Chuckawalla Valley in California is named for a species of—
Snake..... Lizard..... Bird..... Stinging insect.....
- 15—If you went to the San Carlos Indian Reservation in Arizona the tribesmen you would find there would be—
Apaches..... Pimas..... Papagos..... Maricopas.....
- 16—Father Garces was killed by the Indians at—
Needles..... Tubac..... Tucson..... Yuma.....
- 17—Desert tortoise eggs are laid and hatched—
In the sun..... In a crevice in the rocks..... In holes dug by lizards and rodents..... Underneath the sand where they are laid and covered by the mother.....
- 18—Major farm crop raised by prehistoric Indians in the Southwest was—
Cotton..... Tobacco..... Corn..... Beans.....
- 19—Virgin Valley of Nevada is famed among mineral collectors for its—
Turquoise..... Thundereggs..... Onyx..... Opals.....
- 20—Geronimo was a famous chieftain of the—
Navajos..... Yumas..... Hopis..... Apaches.....

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AZINE



Unusual prizes for the rock hunter are these Wonderstone pebbles found along the shores of Lake Lahonton, whose waters vanished from northwest Nevada thousands of years ago.

Wonder Pebbles of Lake Lahonton

By HAROLD O. WEIGHT
Photographs by the author
Map by Norton Allen

At some period in the prehistoric past, the waters of an inland sea which covered parts of Utah and Nevada were creating fantastic rock forms along its shores. The sea has long since disappeared—but the rocks are still there. Lucile and Harold Weight recently mapped a trail into this area which will interest all those who seek new desert regions to explore.

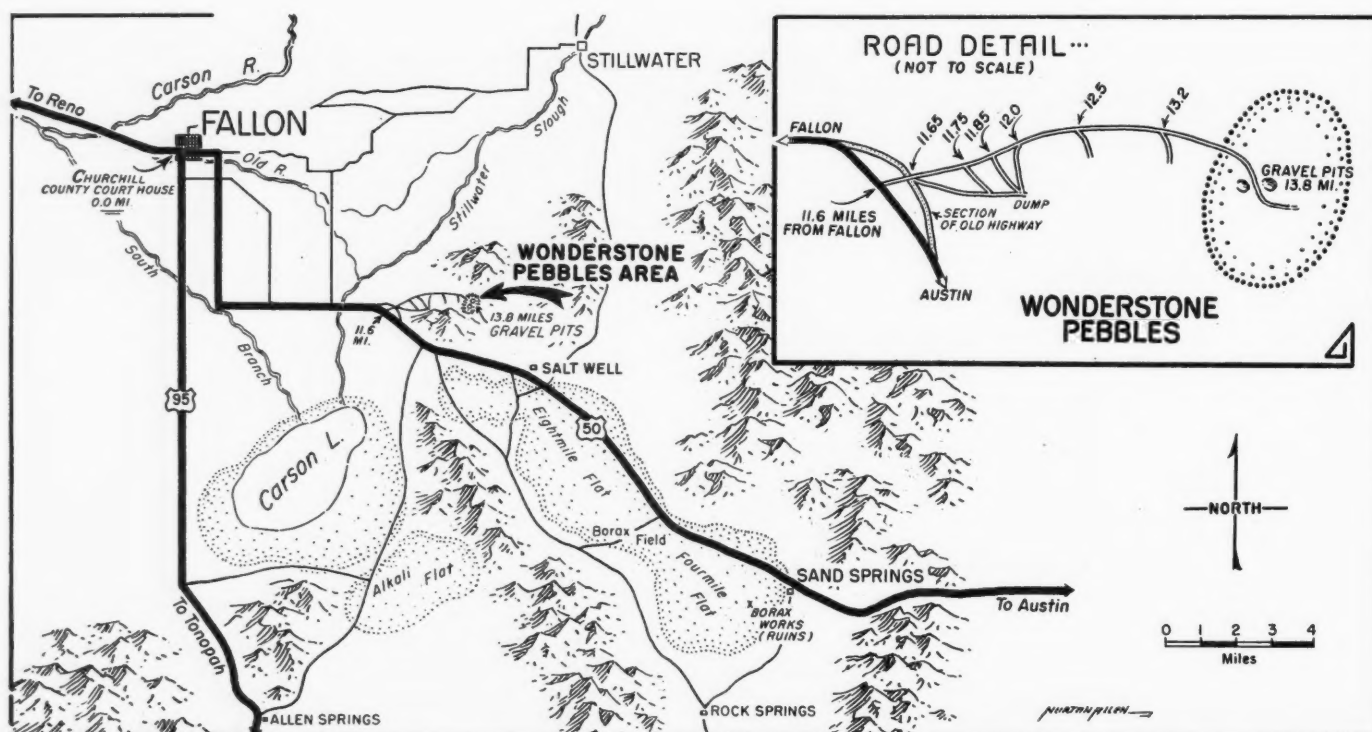
EASING wearily back in the saddle, I. C. Russell searched the barren hills ahead. His trained eyes found an endless shallow shelf outlined by dark rock. Above it was a second terrace, then others still higher.

Northward along the shelves he saw a bluff topped with fantastic greyish tufa formations. As if his expectations had been fulfilled, Russell nodded and rode on across the sterile flats.

Through the windy spring of 1881,

the mirage-haunted summer and warm early fall, Russell zigzagged across northwestern Nevada and parts of California and Oregon. Seven months—3500 miles in the saddle—he followed his strange quest. He was an enigma to the wandering Paiutes, for he wasn't prospecting or hunting game or looking for land with water and pasturage. Rather, he sought the most desolate wastelands and followed the most alkaline valleys.

They would have felt confirmed in their belief most white men were crazy had they known he was tracing out the shorelines of ghostly lakes which had been transmuted to windblown playa dust before their ancestors came to



the desert; that when he studied the narrow benches he was peering back through unknown centuries to see restless waves wash pebbles to and fro on a forgotten shore; when he looked at grey tufa precipitated on battlements of cliffs, he was seeing wind-harried billows roar in from a vanished sea to smash against the rock.

Russell was mapping Quaternary lakes of the Great Basin for the United States Geological Survey. Nevada's phantom Lake Lahonton, part of whose basin is occupied today by Walker, Pyramid and Winnemucca lakes, absorbed most of his attention. At its peak, in the last glacial epoch, Lahonton was less than half the size of its neighbor Lake Bonneville, then flooding much of Utah, but it covered 8922 square miles, more than 26 times the present area of Lake Tahoe. Its jaggedly irregular basin, shaped by fault trough valleys, extended from Oregon southward more than 250 miles.

No rock-collector, Russell was interested in the region's stones only if they helped him understand the vanished lake. But Lahonton will reward rock-hound visitors. In at least one place its waters quarried a deposit of the fascinatingly colored and patterned rock called Nevada Wonderstone and rolled the rough pieces into smooth pebbles ready for polishing.

Lucile and I heard of the Wonderstone pebble field when we visited the Farm House, operated by Alfred and Hallie Jones at the junction of Highways 50 and 95, nine miles west of Fallon. The Joneses, once members of the Los Angeles Lapidary society,

came to Nevada in 1947 to hunt petrified wood. The hunting was good and they thought how pleasant it would be to earn one's living right in collecting country. A year later they opened their restaurant at the junction.

Alfred Jones was not at home, but Hallie showed us their collection of rocks and sun-purpled bottles, and told us of their plan to set up a lapidary shop behind the restaurant. Among the rocks were some beautiful specimens of Wonderstone pebbles. They came from gravel pits east of Fallon, she explained.

Back at Fallon, following her directions, we zeroed the speedometer at the Churchill county courthouse and followed Highway 50's erratic course south and east through the town. The site of Fallon was under hundreds of feet of water when Lake Lahonton was full. Today irrigation has made it the heart of a rich farming, ranching and dairy district, noted for its cantaloupes and bronze turkeys. It also is the home of the Nevada state fair and of the Fallon Rock and Gem club, one of the most active societies in Nevada.

At 11.5 miles east of Fallon, Highway 50 curves southeast to round barren hills and enter the great chemical flat which stretches between Salt Wells and Sand Springs. We turned left from the highway onto a dirt road at 11.6 miles, crossed an abandoned stretch of old highway, then kept left past a series of Y's to round the hills on their north side.

The gentle curve along which we drove was a strand of vanished Lake Lahonton. The grotesque tufa-spattered

little range on our right once had been an island or a promontory. Its mushroomed domes and columns and sponge-like protuberances proclaimed the great height to which the lake waters once flung their lime-saturated foam. But for thousands of years only the wind-made ghost sound of those waters had whispered upon this shore to die, echoing hollowly, in the caverns of the lake wall.

Our road was good enough now, but hardened clay ruts gave evidence it would be slippery and treacherous in wet weather. We crossed what evidently had been a shallow bay, followed the curving road southeast and stopped at the edge of the gravel pits, 13.8 miles from Fallon. A small conical hill of gravel marked the spot.

We found that Hallie Jones had not exaggerated when she spoke of tons of the pebbles. Although not all of them were worth collecting, there was plenty of territory in which to hunt. We traced the pebbles along the ancient shoreline to the north and west, and far up the bay slope to the south. They did, however, seem confined to certain levels.

Some of the pebbles were no larger than peas, yet their designs were complete. Many were two inches or more in diameter. They reminded us of the Pinto rock popular with collectors who venture across the Mexican border to Pinto Mountain in the Yuha desert, and the Rainbow rock of the Santa Rosa Mountains edging Coachella Valley. However, those stones were supposed to be silicified sandstone, while Nevada Wonderstone has been called



Petrified flying saucers? No, these odd stones mushroom from the terrace above the Wonderstones, are dendritic tufa deposited around the rocks which once lay in the shallow waters of Lake Lahonton.

a fine rhyolite. Neither classification seems quite right for the Wonder pebbles, but if they are a silicified sedimentary rock, it must be a claystone.

Their predominating colors—mahogany red, red-brown, purple-red, dark gold, cream, buff and lavender—are in convoluted lines, in the parallel bands of an Indian rug, in marbled patterns. They are curved like the contour lines of a map, whorled in concentric circles like grotesque eyes, scrawled like the phantasmal creations of an "expressionist" painter or encircled with rhythmic parallel lines that looked like the very terraces of the shores we followed.

These patterns and colors are the main attractions of the Wonder pebbles, and wetting brings both out brightly. You can conserve your "licking power" in warm weather by using a can of water to dunk them in. And you can select stones so smooth that

the only polishing needed to make them attractive cabinet specimens is a vigorous rubbing with waxed bread paper. We were frankly incredulous when Hallie Jones told us she had finished her pebbles that way. But we experimented in the field and found paper-polishing easy and satisfactory.

Along with the Wonder pebbles, we found the tiny pieces of translucent chalcedony and agate which Hallie had called moonstones. But the strangest specimens were those I located as I hiked up the long gradual slopes to determine the limits of the Wonder pebble field. They were fat grey disks, singly and in groups, which ranged from a few inches to several feet in diameter and were convex on one side, concave on the other. I hoisted one to my shoulder and called to Lucile: "Look, I've found a petrified flying saucer!"

That started her toward my upper

terrace, but soon her progress became a series of zigzags. When she finally arrived, her distractions proved to have been large dark boulders embroidered with the mustard, blue-grey and orange of lichens. She had been searching for pieces small enough to take home for arrangements and decorative garden rocks.

The objects I had found did look more like a newspaper artist's sketch of a flying saucer than any proper member of the mineral kingdom. But closer inspection showed that apparently they had formed about small rock centers, having a curious branching structure underneath, and we decided they must be some kind of tufa. Later reading of Russell's *Geological History of Lake Lahonton*, published by the Geological Survey in 1885, convinced us we were right. He wrote that three types of tufa—lithoid, thinolitic, and dendritic—had been deposited by the

lake, and pictured our "saucers" as one sample of the dendritic kind.

Russell was not the first scientist to recognize the vestiges of the old lake. Captain James H. Simpson entered its basin near Sand Springs, southeast of the Wonder pebble field, in 1859 while exploring for a wagon road between Camp Floyd in the Salt Lake Valley and Genoa, Nevada. Henry Engelmann, geologist of the expedition, noted the waterlines and lake deposits in his report. Clarence King's report of the geology of the Fortieth Parallel surveys carried the first considerable discussion of Lahonton, and King named it.

But it is Russell, rider of those long ghost trails, who will be remembered as the godfather of Lake Lahonton. His report stands as the most complete investigation of the lake. It is difficult to imagine a period so cold the Sierra Nevadas and Utah's Wasatch Mountains were buried under ice while glaciers crowned mountains in central Nevada. But in such a time, Russell believed, Lahonton rose to its awesome bulk, fed principally by melting snows and glaciers of the Sierras. That was the period called Pleistocene, the Glacial age which opened our Quaternary era, when cold from the polar caps spread four times toward the equator, driving living things before it. Lahonton's two high stages, according to Russell, coincided with the last two ice ages in North America.

This part of Nevada probably was at least as arid before the ice came as it is today. As the winters lengthened and the snow-pack deepened, great



Hallie Jones and her husband Alfred are such enthusiastic rock collectors they established a new business in Nevada so they could live in the heart of a rock hunter's paradise. Mrs. Jones exhibits a few of the Lahonton Wonderstones in her collection.

streams drained into the basin. Many lakes rose, crept through valleys and passes and joined. Walker and Pyramid and Winnemucca and Honey lakes became one and the flooded Carson Sink and Black Rock desert were connected by narrow straits.

The great lake remained at that level with only minor fluctuations for

a long period. Then the inflow dribbled away and the basin dried. Another cold age eventually brought the lake 30 feet higher than its first rise. Then the water retired slowly until it evaporated completely and most of its sediments were buried under new erosion. But the beach lines, the terraces where it hesitated for varying periods, the tufa formations, remained almost unchanged by the arid climate until Russell came to chart them out.

The saucers are scattered over their particular level in sufficient quantity for all collectors who want one. They are interesting mineralogical curiosities. There are plenty of Wonderstone pebbles, too. But there is more fun in selecting than accumulating in this field, and a small sack should hold all you want. If you start a little beach shrine, those you discard may be just the ones someone else wants. Or to one physically handicapped for prospecting the old shorelines, your monument may become a happy hunting ground.

When turning over the saucers, keep an eye open for scorpions. Also you may see friendlier inhabitants. A little mottled lizard took up his perch on a nearby rock while we were having lunch and studied us intently. Usually these small reptiles are shy but when this one saw he had caught our attention, he pattered to within two feet of me, in the manner of a friendly puppy, and stared even more intently. Suddenly he made straight for Lucile, stopping even closer to her.

"Maybe it's his lunchtime," she suggested. I tossed him a bit of canned

These gravel pits southeast of Fallon are in the center of the Wonderstone pebble deposit. Dark lines on the hill (right) mark some of the old shoreline terraces of Lahonton.



fish. He dashed wildly for it, but on contact let us know that it didn't please him. Lucile threw a bit of whole wheat bread. He pounced on that, but the first bite decided him against it. He simply ignored a dessert of raisins. So you too may face the problem of the proper diet for a friendly lizard on Wonder Pebble beach.

Hallie told us that March, April, May, September and October are the best months for collecting in the Fallon region. The September day we were there was ideal. The sun was still high, the air pleasant, when we started back toward the highway with all the pebbles we wanted.

The cliffy little range to the south reminded us that there were Indian caves in the Fallon area, and when a little track branched toward the hills we followed it almost to the base of the bluff. Hiking over the rough and

MOTORLOG

- 00.0 Churchill county courthouse, Fallon. Follow highway 50 south and then east through Fallon and toward Austin.
- 11.5 Highway swings southeast around range of hills.
- 11.6 Turn left, leaving highway for dirt road. Cross section of old highway and continue north of east to keep north of range of hills. Many roads cut to the right from this dirt road but keep left to:
- 13.8 Gravel pits. Park car and hunt for wonderstone pebbles, tufa "saucers" and small agates on surrounding slopes and flats.

broken slope to the cliff, we came upon what at first appeared to be only a high, shallow open cave. But at the back a low opening entered the cliff, and a flashlight beam showed it continued some distance. Lying flat on my

stomach, I could just wiggle through, and in a moment I stood up in an inner cave. It was not large, but the ceiling was high and a crude stick ladder of modern design suggested there might be an extension higher up.

I was fascinated by the glistening black of the limestone walls. If the black was caused by smoke, many an ancient fire must have burned there. Modern visitors had left many traces, but there was no other visible evidence of early inhabitants until I crawled back to daylight. There Lucile pointed out faded red pictographs on the open cave roof. Later on the slope below, we found a scraper and chippings of the Wonderstone we had been collecting.

Such an ideal refuge against storm and cold must have been occupied early. Man is known to have lived close to the ice sheets in Europe, but

This monument to Gold Rush immigrants along the old Overland trail 8.1 miles west of Fallon on Highway 50-95, marks the western end of the dread Forty Mile desert, one of the arid basins of vanished Lake Lahonton.



until recently anthropologists questioned such a possibility in America. Lake Lahonton certainly would have attracted any humans that existed nearby, but the cave would have been under water at the lake's height. Material found in the excavation of Lovelock cave—a similar cave residence near Lake Lahonton—has been identified as belonging to a primitive Basket-Maker type, estimated to have lived there first about 1000 B. C.

We climbed a steep faint trail to the cliff-top above the cave. Looking out over part of the vast Lahonton basin, we could see the old water lines sharp-

ly clear against the raw hills and touch the strange tufa formations which the spray of lost centuries had deposited. Heated air rising from the basin floor blurred its outline until the flats rippled and shone like distant waters. Shallow ghost waters, only a reminder of the inland sea which rolled here when mastodon and primitive camel and sloth and nightmare-toothed tiger fed and hunted along its coasts, and distant icefields chilled the air.

The lake which was the only reality to them is a fantastic mirage to us. We accept climate as a relatively unchanging background to our existence. We

praise it or complain about it—but we expect our desert to remain desert. But will it? J. C. Jones of the University of Nevada, studying Lahonton many years ago, estimated that a doubled annual rainfall would fill the great lake again—and what can we know of tomorrow's weather? Perhaps some day instead of making gigantic efforts to conserve water in the West, the nation will be fighting against its abundance.

The dead lakes of the West already have influenced our national past. If you will stop by the south side of Highway 50 and 95, 8.1 miles west of the courthouse in Fallon, you will see a beautifully appropriate little monument with this inscription: "Ragtown Crossing. Dedicated to those pioneers whose determination brought them across the Forty Mile desert to this spot and sweet water."

The dread Forty Mile desert was part of the arid bed of Lake Lahonton. Possibly you cannot find the site of Ragtown itself, today, but early visitors tell of a burial ground there with 200 graves, many those of women, and more of children. They were broken by the toil of the barren trail, by bad water, starvation, disease. You can say, justly, that they died because centuries before a lake had died and left its stripped skeleton across their path. The Donners reached the Sierras late and perished in the snow because they had been slowed by the salt deserts of Lake Lahonton and Bonneville.

Today Lahonton seems a peaceful ghost. You will come to no harm if you visit it prepared against ordinary desert dangers. The beautiful pebbles, mementos of the land's strange past, will repay your visit. But to many the reward will be the thrill of standing on an ancient beachline in the silent, sunlit desert when a sudden rush of wind recreates the pulse of rolling waters. When far above you see terraces waves once cut and, with new windows opening, your mind gropes towards a comprehension of myriad wonders and incredible antiquity of the world we pretend is ours.

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SOCIETY MAY EXCAVATE THREE ARIZONA SITES

Arizona's Yavapai County Archeological society is awaiting permission from Washington before starting excavation of three sites located in the Groom Creek area. Application for permission to excavate was made by H. R. Crittendon of the group's survey committee. Acting Director E. B. Sayles of the Arizona State Museum, Tucson, is assisting the society by providing information on methods of making an archeological survey.

Hard Rock Shorty OF DEATH VALLEY



A dust-covered coupe rolled to a stop in front of the Inferno store and two men got out and sauntered over to the bench where Hard Rock Shorty was dozing in the mid-winter sun.

"We're from Davenport, Iowa," one of the strangers explained. "Finished harvestin' the corn two weeks ago and decided to come out and see the West."

Hard Rock grunted an acknowledgment of the introduction and reached for his corncob pipe. "Guess this pipe musta come from Iowa, too," he remarked. Shorty pulled down the brim of his hat and closed his eyes. The conversation was ended as far as he was concerned. But the strangers wanted to talk.

"Too bad all this land goin' to waste," one of them said. "Won't nothin' grow here?"

"Growin'est place you ever saw," replied Shorty. "All it needs is water."

The tourist looked out over the barren floor of Death Valley. Obviously he was skeptical.

"D'yuh ever see corn grow 30 feet high?" Shorty asked. Then, before the stranger could reply he went on.

"Well, it grows bigger'n that over around the spring in Hayfield canyon on th' other side o' the valley. That's where my partner Pisgah Bill tried farmin' a few years ago.

"Bill planted sweet corn. He wuz developin' a lead mine near

there and figgered he jes as well grow some o' his own grub. But by the time the corn wuz ripe the stalks wuz so high he had to use a stepladder to bring the ears down. He planted pole beans along with the corn, and the only way he could get the beans wuz to shoot 'em down with a .22 rifle. Ladder wuzn't long enough.

"Bill didn't like that kinda farmin'. Too much work. So next year he planted potatoes. But them taters got so big they crowded each other right out o' the ground. Bill lived all summer on one hill o' spuds. They wuz too big to pack out on the burros, so most of 'em went to waste.

"Next year Bill planted most of his patch to alfalfa. 'The burros'll have a good feast this year,' he explained.

"Worked fine 'til hot weather came. All the burros in Death Valley flocked in here to feed in Bill's alfalfa field. Then one day the temperature went up to 120 degrees and the alfalfa started growin' so fast the burros couldn't keep up with it.

"When Bill come down the trail from his mine that evenin' about sundown there wuz 17 burros all tangled up in the tops of them alfalfa stalks 22 feet above the ground. They wuz brayin' and kickin'. Took Bill two days an' a night and he broke three axe handles choppin' down the alfalfa stalks to keep them burros from dyin' o' thirst."

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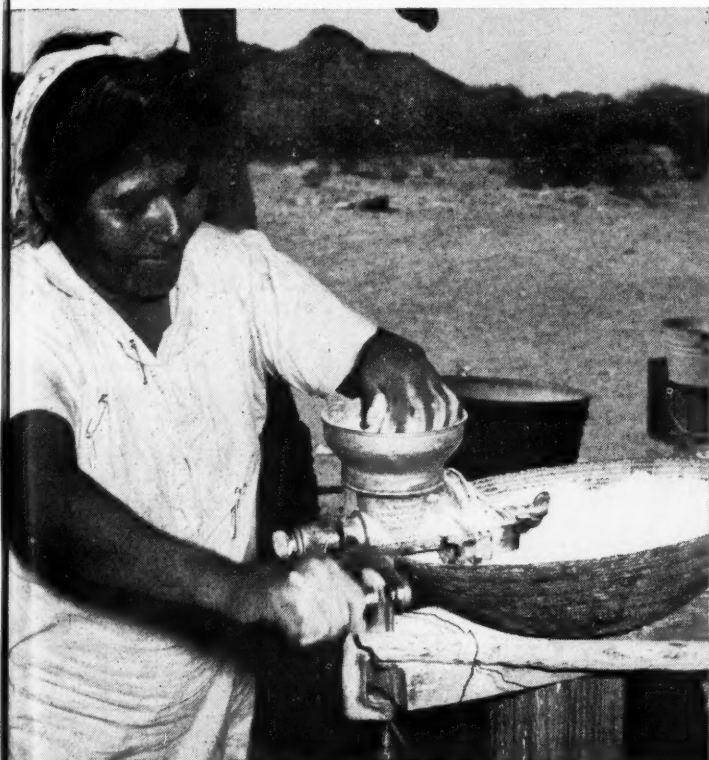
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ZINE

Pictures of the Month

Papoose

Winner of first prize in Desert's March photo contest is Andrew Crofut, Reno, Nevada, with this happy portrait of Indian papoose and mother. Picture was taken with a 3¼ x 4¼ Model B Graflex with Agfa Super Pan portrait film pack, 1/50 sec. at f.11.



... our daily bread

On the Papago reservation of southern Arizona the crude tools of the ancients gradually are giving way to the labor-saving inventions of the white man. It was simple and inexpensive to replace the stone metate with the handmill for grinding grain. But threshing machines are more costly, and the Papago woman below is shelling her beans as did her ancestors—with a flail. The lower picture, taken by Carson V. Ryan of Sells, Arizona, was awarded second prize in March contest. Taken with a Rolliflex before noon, f.11.

LETTERS...

Morgan Will Appreciate This...

Santa Fe, New Mexico

Desert:

When may Desert readers expect another of those fine stories by Morgan Monroe?

I have just finished reading "Brothers in an Ancient Faith" in your April magazine. It is by far the best and most absorbing story you have published this year. The same was true last year with two stories by this same writer. I cannot recall the titles but one described a trip through the Navajo country and the other was the best historical analysis of radioactive mineral prospecting and mining in the Southwest I have ever seen in a popular magazine. I felt they were your two top stories of 1949.

Many of us knew Mr. Monroe when he was managing editor of the Durango Herald-Democrat, and when I was formerly located over in the San Juan Basin country of New Mexico and Colorado we waited impatiently for his excellent Sunday feature stories in that

newspaper. His penchant for accuracy in his work always commanded our respect. Coupled with his ability to make any subject interesting and absorbing this, in my opinion, makes a rare combination in times when slipshod writing is seen in some of our largest newspapers and magazines.

Now, when may we expect another story by Mr. Monroe in Desert? Can't you arrange for him to write for you monthly? Let's have more of them. By the way, where is he these days? Haven't seen him in two years.

W. R. JAMES

Morgan is now manager of the Gallup, New Mexico, chamber of commerce. It is a busy job, but he has promised to spend his off-duty hours preparing more stories for Desert readers. —R. H.

Credit to Dr. Colton...

Altadena, California

Desert:

Thanks for printing the report of the Wetherill Memorial Committee.

It was very generous of Dr. Colton to list the full committee but I would like to state that full credit for the project should go to Dr. Colton. He really did practically all the work.

HARRY C. JAMES

Pictures of the Month...

Again in May, Desert Magazine staff invites all photographers to participate in a competitive contest for the best pictures of the month. The contest is limited to desert photographs, but covers a wide range of subjects—landscapes, wildlife, rock formations, mining and prospectors, human interest, Indians, or any phase of life on the desert or natural landscape. Following are the rules governing the contest:

Entries for the May contest must be in the Desert Magazine office, Palm Desert, California, by May 20, and the winning prints will appear in the July issue. Pictures which arrive too late for one month's contest are held over for the next month. First prize is \$10; second prize \$5.00. For non-winning pictures accepted for publication \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contest must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the Desert Magazine office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

The Desert Magazine

PALM DESERT, CALIFORNIA

Desert's Annual Cover Contest Will Be In June

The Destroyers...

Las Vegas, Nevada

Desert:

I am enclosing some snap shots showing the manner in which Nevada's Valley of Fire is being neglected and mutilated. It often happens that Joshua trees and other yuccas are cut down to decorate the store windows in town, and then hauled off to the dump. It is hard to understand the short-sightedness of so-called businessmen who do this kind of thing to a landscape which is their biggest business asset.

CLAUDE HAGGERTY

Anyway, the Meaning is Clear...

Los Angeles, California

Desert:

In your April issue of Desert you quoted the camping motto of my son, Everett, "Where I go I leave no sign." If you will check back on the original publication from Everett's writings I think you will find the quotation properly should be, "When I go I leave no trace."

You suggested this may have been of Indian origin. I am inclined to believe it is of Boy Scout origin, but so far I have been unable to confirm this conclusion.

CHRISTOPHER RUESS

Lubbock, Texas

Desert:

In your story about the Annual Liar's contest you quoted C. E. Utt's story about coyotes catching fish with their "tales." Do they also gather for a Liar's Contest? This would surely be an amazing feat!

LILLIE L. DEIMLER

Anything can happen at a Liar's Contest.—R. H.

INDIANS EMPLOYED TO HELP TAKE CENSUS

For the first time, Indians themselves are taking the census on reservation lands. In a joint announcement, the Bureau of the Census and the Bureau of Indian Affairs said trained Indians are among the 150,000 enumerators and crew leaders who on April 1 began the 17th decennial census of the United States. Of the estimated 150,000,000 people in this country, some 400,000 are counted as of Indian descent. An estimated 100,000 live off the reservations. Reservation Indians, in addition to answering the usual questions, will be asked questions from a supplemental form worked out by the government. These questions relate to tribal and clan affiliation, degree of Indian blood, participation in native ceremonies, multiple names and type of shelter.

THE DESERT MAGAZINE

THE *Desert* MAGAZINE CLOSE-UPS

In early June when school is out George Bradt and his wife "Sis" will load their camping equipment into a car along with their camera equipment and a strange assortment of bags and boxes and tools and head out into some remote wilderness area for their vacation sojourn among the birds and bugs and snakes.

The Bradts are naturalists, and their stories and pictures of wildlife in the Southwest are always in demand by editors. Last summer they made a leisurely trip from the Arizona border along the Mexican gulf coast as far as the state of Nayarit, collecting snakes and insects for the American Museum of Natural History.

They are teachers by vocation, and the last two years have been employed in the Overgaard school located in the Ponderosa forest at Heber in northern Arizona.

George's articles have appeared intermittently in *Desert* for several years, and this month's story about the harmless little black-headed snake that lives in the Huachuca Mountains of Arizona is the first of a new series prepared for *Desert* Magazine. Many little-known denizens of the desert country will be introduced in both picture and text in the months ahead, thanks to the very efficient team of Bradt and Bradt.

Norton Allen, whose travel maps are one of the most popular features in *Desert* Magazine, is an amateur archeologist with an uncanny faculty for discovering old Indian sites. His home is in La Mesa, California, but he and his father spend their winters in their trailer, generally parked near Gila Bend, Arizona.

During the past winter Norton's excavations have produced some unusual relics of the ancient Hohokam culture. His most unusual finds were small figures of birds and people carved from sea shells which probably were brought from the Gulf of California. Some of his artifacts will go to the museum at the University of Arizona and others will be added to his own collection which is one of the finest private exhibits in the state.

Betty Woods, who wrote *We Are Desert Gypsies* for this issue of *Desert* Magazine, is wife of the well-known fiction writer, Clee Woods. They have a lovely home in the mountains above



George Bradt, writer-naturalist, with a baby Golden Eagle which he climbed to a ledge to photograph.

Pagosa Springs, Colorado, where they remain between gypsy trips through the Southwest. Mrs. Woods wrote the story of their experiences in a trailer as a special assignment from *Desert*

editors after many requests came to the editorial offices from readers who wanted to know whether or not it is practicable to use a trailer for motor touring in the desert.

This Year Plan To Visit Enchanting MONUMENT VALLEY

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No Late Rains, So Desert Wildflower Displays Limited

The late spring rains for which lovers of desert wildflowers were praying were withheld by the rain gods over most of the Southwest, so earlier forecasts of a disappointing flowering season have come true. With the exception of a few limited areas, the desert lowlands this spring have been without the moisture necessary to cause sleeping seeds to burst into colorful life.

Desert Magazine's faithful reporters have made possible this final round-up of flower information.

MOJAVE DESERT—Desert Botanist Mary Beal apologetically writes: "The Mojave desert still has little to offer in the way of wildflowers. I have been out in all directions and found only a few spindly blossoms in widely scattered spots. This is decidedly not a year for floral displays." Desert shrubs, however, are blooming in most areas, and in the Providence Mountains flowers were blooming brightly by April 1.

LAKE MEAD NATIONAL RECREATIONAL AREA—Seven months with less than an inch of rain—that is the story around Lake Mead. But Maurice Sullivan, park naturalist, says there has been a little more rainfall at Pierce Ferry and that March rainfall at Davis

Dam improved the situation there. Already in bloom by first of April were desert lilies, brittlebush, poppies, beavertail cactus, desert heliotrope, morning bride, desert sweet alyssum, spectacle plant, lupines and sting bush. "April is certain to be our big month," Sullivan said, but warned the usual spectacular display is not general over the area.

DEATH VALLEY—Although temperatures have been ideal for growing, flowers have not developed on the floor of Death Valley because of a lack of rain below sea level, according to T. R. Goodwin, Monument superintendent. Some individual plants, representing several species but singly distributed, are producing flowers. Even above sea level, the spectacular mass blooming of last year during May will probably not be duplicated this year. But in the Panamint Range there has been sufficient precipitation to bring out a good many blooms.

MESA, ARIZONA—A fine display of cactus blossoms is virtually assured during May in this region of Arizona, according to Julian M. King of King's Ranch Resort. The Hedgehog, prickly pear, barrel, staghorn and other cacti were well budded early in April and all should be fully in bloom before May 1. The giant saguaro were showing white on top during the past month, will be in full bloom during May. Palo Verde and ironwood trees will also be blooming. As to flowers, King gave one of the few encouraging forecasts. "We have not had continuing rains," he wrote, "but the desert is green and the flowers are coming in abundance. It looks like a very colorful month in May."

SAGUARO NATIONAL MONUMENT—From the Tucson, Arizona, area comes the same report of insufficient moisture. But there were cacti and some flowers blooming in April, according to Forrest M. Benson Jr., park ranger, including hedgehog, prickly pear, ocotillo, teddybear cholla and staghorn cholla. Among associated plants budding were the jojoba and brittlebush. In flower by end of March were the pentstemon, desert marigold, desert mallow, facelia, zinnia, fairy duster and the creosote bush.

LAS VEGAS, NEVADA—February and March rains brought to life the desert flowers and along stream beds and near lakes there should be "an abundance," according to Mrs. Dora Tucker. Verbenas bloomed early, and lupine, phacelias, senecias and primrose were plentiful, should last into May if there is sufficient moisture. Along the shores of new Lake Mojave—which is what the local folks call the new lake formed by Davis Dam—the desert lilies were reported "the thickest seen in years." Rock daisies, wild chickory, scale bud, apricot mallow and many other plants and shrubs are to be found among the rocks and sage. Cactus blooms are expected to last into early summer.

CASA GRANDE NATIONAL MONUMENT—From Coolidge, Arizona, Supt. A. T. Bicknell reported the desert "appears to be in fine shape" and that only a late freeze could keep flowers and cacti from blooming on schedule. Conditions have been nearly normal as to rainfall.

ANTELOPE VALLEY—After a good start and a late March rain which would have done wonders, this California valley had what Jane S. Pinheiro termed a "howling wind" which did more damage than the rain did good. "Most of the plants that started out so well have shriveled and blown away," she reported from Quartz Hill, near Lancaster. Because her earlier forecasts had been optimistic, Mrs. Pinheiro wrote ruefully in her final report: "Maybe Mother Nature will cooperate a little better next year."



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HERE AND THERE . . . on the Desert

ARIZONA

Trading Posts Going Modern . . .

WINDOW ROCK—Modern trends are penetrating the Navajo country. Several trading posts have changed over to a help-yourself basis with turnstile and check stand at the exit. In addition, the post at Ganado has opened a canteen and snack bar. This is a great departure from the days when flour, sugar, coffee, cloth, clothing and limited stocks of hardware were available. In recent years trading posts have expanded their inventories of merchandise, a survey in 1947 revealed an average investment in 94 posts was \$54,638.—*Gallup Independent*.

Logging Starts Early . . .

FLAGSTAFF—Because of mild weather which permitted logging operations to start earlier than usual, northern Arizona's sawmills resumed operations more than a month ahead of schedule. Mills in Flagstaff and Williams were rolling by the first of March, with others slated to be in operation by April 1. Lumber cut in Arizona totals about 220 million feet a year. Lumber industry payrolls are computed at more than \$4,000,000 a year.—*Coconino Sun*.

North Rim Will Open . . .

WILLIAMS—North rim of the Grand Canyon will be opened to visitors May 15, the National Park Service has announced. Grand Canyon lodge on the north rim will open May 26.

Annual Ride Successful . . .

WICKENBURG—With a maximum rider list of 150, including half a hundred guests, the annual Desert Cavaleros horseback trip up legendary Hasyampa River and the higher country around it was highly successful early last month. The annual ride (*Desert*, July '49) is a four-day trek.—*Wickenburg Sun*.

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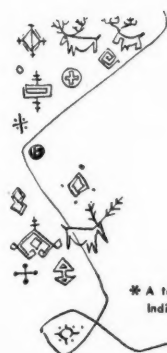
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New Plan for Ft. Huachuca . . .

BISBEE—A plan which may enable Arizona to retain Ft. Huachuca, 74,000-acre military reservation declared surplus by the government last year, has been worked out by a group of Cochise County business and professional men and has been laid before Gov. Dan Garvey and Adj. Gen. A. M. Tuthill. Between 1877 and the end of World War II the government spent more than \$70,000,000 developing Ft. Huachuca. Last year it was turned over to Arizona as a gift. The state set aside 38,000 acres as a game preserve. This is now managed by the Game and Fish Commission. The remainder was placed under jurisdiction of the National Guard as a site for maneuvers and encampments. Funds for its maintenance are virtually exhausted. The new plan involves organization of a non-profit corporation which would lease part of the reservation for light industry and homes, income to be used for maintenance of the area and expenses of the National Guard.—*Los Angeles Times*.

Train and Cattle Clash . . .

TEMPE—When 52 head of cattle wandered onto railroad tracks near here recently the result was fatal—to 12 of the cattle. Twelve were killed, five more of the animals were injured when a train plowed into the herd.—*Tucson Daily Citizen*.



* A term used by pioneer settlers for these Indian shoes, worn by men and women alike.

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Approximate dates July 5 to July 20. Exact date to be announced in June issue.

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One-third with reservation, balance on sailing.

Starting May 15 through June 25, twice weekly trips will be run from Lily Park on the Yampa River to Jensen, Utah, on the Green River. Three-day trip, Monday to Wednesday and Friday to Sunday, \$75.

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HAND MADE MOCCASIN: Soft "Buck Tanned" leather trimmed with nickle silver conchas set with turquoise color stone, wool shearing insoles—for indoor or outdoor wear. Women's sizes 4 to 9, \$5.95, Men's 6 to 12, \$6.95 pre-paid, cash with order. Satisfaction guaranteed. Make ideal gifts with name embossed in gold on sole if desired at no extra charge. Photos on request. Mohave Gem Shop, Kingman, Arizona.

GENUINE ZUNI INDIAN Beaded Rabbits Foot Dolls. Chiefs and squaws. 2 or 3 inches high. Buckskin thong attached. Colorful as lapel ornaments, zipper pulls; attach to key chains or hang in car. \$1.00 each. Pair \$1.75. Postpaid. The Cottonwood Tree, 2440 Pueblo Bonito Drive, Albuquerque, New Mexico.

BOOKS — MAGAZINES

AN ENGINEER is weeding out his technical library of old books and magazines. Some of general interest. Bargains galore. Send for free list. D. Becker, 22 Maple Street, Galesburg, Michigan.

BOOK OF CACTI for the amateur collector. Describes and classifies over 500 varieties, over 200 photographs. Subjects on care, their culture, how to plant in rocks gardens and pots. Sent postpaid \$1.00. Discount to dealers. Published by M. Nowotny, 1401 Broadway, San Antonio, Texas.

BOOKFINDERS—Scarce, out of print, unusual books, quickly supplied. Send wants. Clifton, Box 1377d, Beverly Hills, California.

"GOLD PANNING FOR PROFIT." Healthy outdoor hobby. Beginners big illustrated instruction book—\$1.00. Miners' gold pans, \$2.00. Prospectors' powerful magnifying glass, \$1.00. Package black sand and real gold, \$1.00. Desert Jim, 627 Lillian, Stockton, California.

PAUNING GOLD—Another hobby for Rock Hounds and Desert Roamers. A new booklet, "What the Beginner Needs to Know," 36 pages of instructions; also catalogue of mining books and prospectors supplies, maps of where to go and blueprints of hand machines you can build. Mailed postpaid 25c, coin or stamps. Old Prospector, Box 21 B 335, Dutch Flat, California.

BIG LIST of books on West. Wilbur Smith, Cornland, Illinois. Want Death Valley pageant color slides, photos etc.

MAGAZINE SUBSCRIPTIONS for all publications at publisher's prices. Courteous, prompt service. F. G. Voltmer, 10211 Seabury Lane, Los Angeles 24, Calif.

BACK ISSUES: of Desert Magazines by the year or single issues. Edna Malott, 5023 Meridian St., Los Angeles 42, Calif.

MISCELLANEOUS

PROSPECTORS AND ROCKHOUNDS WANTED. To join the newly incorporated United Pros- or beginners the articles in our magazine are bound to help you enjoy your hobby and the bound to help you enjoy your hobby and the outdoors. Send your name for our new brochure and literature. United Prospectors, Box 13, Dutch Flat, California.

GOING TO ALASKA? By the highway, air or boat. Sportsmen, tourists, settlers, job-seekers are cautioned to ask your questions from one who lived in Alaska many years. Send one dollar and ask advice of Bess Rowe, Box 478, Palm Springs, California.

FOR SALE: 1944 small Dodge army truck, 4 wheel drive with winch (no cable) 9:16 8-ply tires, 4 speeds ahead. Bell Telephone Co. repair truck. Closed cab and curtains on body. Made by Bell. Good for rock hounds, prospecting and mining. Sickness forces sale. Cost \$716.85, equity \$489.90, next payment \$32.42 April 15. Want equity. Herb Brown, Box 57, Lake Hughes, Calif.

CHRISTIAN MAN handy with tools desires work in desert or mountains, small wage OK. W. Hendrickson, 638 San Julian St., Los Angeles, Calif.

KODACHROME SLIDES ON APPROVAL. Bryce National Park—sunsets, sunrises, scenes from the trails and from the rim. Death Valley—the '49 Centennial Celebration, sand dunes, mountains, startlingly colorful scenes, sunsets. Sequoia National Park—big trees, the High Sierras, views from Moro Rock. Yosemite—waterfalls, cliffs, animals, flowers, the High Country. Inspect our slides and fill in your own collections. Slides of other Western National Parks also available. Please mention Desert Magazine. Douglas Whiteside, Yosemite, California.

BOATING GREEN, COLORADO Rivers early summer. Desire agreeable companions share adventure and expense. Hayden Huston, Daniel, Wyoming.

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OLD WESTERN outlaw photos, \$1.00. 20 different Old West, Pioneer, etc., photos, \$1.00. 10 different battle of Wounded Knee 50c. 5 different Lincoln 25c. Lists 5c. Vernon Lemley Store, 302 Dallas Ave., Mena, Arkansas.

FRED AND JESSIE PORTER welcome you to SHOOT!! your pictures of "Ghost Town of Calico" and mountains in miniature, at the "POW-WOW" Trading Post, Hiway 91, Yermo, Calif. The hub of Rock-hounds of Paradise. Crystals, cutting material in rough or slabbed. Uranium, highly fluorescent, and specimens. Miniature cactus, gifts and souvenirs.

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SPORTSMANS SPECIAL: 1947 Ford Pickup with detachable camper body. Lights, bed, but. stove. Columbia axel, good tires, many extras. \$995. Graybill, 1355 S. Gibbs, Pomona, California.

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FOR SALE: Ultra Violet Lamp. Uses 6-volt battery only. 6-bar quartz tube, best type obtainable for portable use. New condition. \$45.00. B. Dowden, 468 Sherbourne, Los Angeles 48, Calif.

Hualpais Celebrate Land Ruling . . .

PEACH SPRINGS—Third anniversary of a supreme court decree which established their right to more than half a million acres of railroad grant land bordering the Colorado River a little below the Grand Canyon, was celebrated in March by the Hualpais Indians. After a 20-year fight, the decree was issued to the tribe on March 13, 1947. It gave them land which was claimed by the Santa Fe Railroad under an 1866 grant from Congress, and an attorney general's ruling in 1931. Also awarded to the Indians was 6381 acres surrounding Clay Springs; a valuable source of water which had been left out of the Indian reservation through faulty surveying. At the final trial court hearing, the Hualpais case was based largely on testimony of old men and women of their ancient enemies: the Apache, Paiute, Mojave and Yavapai. These testified that the land in question had always been regarded by them as Hualpais country.—*Mohave County Miner.*

REAL ESTATE

OCOTILLO DESERT RESORT: in a beautiful setting of mountains and desert. Business locations on Hiway 80. Residential lots with abundance of soft pure water in Mutual Water Co., \$250.00. Send for circular. John C. Chalupnik, Ocotillo, via Plaster City, Calif.

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RICH BOTTOM LAND: 1 1/4 acres, good well, 3 partly furnished modern houses, fireplace, large rock building suitable for feed store, garage and other business opportunities in small town, Descanso, Calif. \$10,500, terms. 30 acres with spacious 4-bedroom modern rock house in healthful and delightful climate. Other buildings, good well. Near Highway 80. \$9,250. Part terms. John C. Chalupnik, Ocotillo, via Plaster City, Calif.

FOR SALE—13 acres raw land. Easy to level. Canal water. Excellent for winter crops—citrus, early grapes, dates, etc. Beautiful building site. 800-foot frontage on Highway 99. 12 miles south of Indio on Highway 99. \$4950, terms. O. T. Goltermann, Rt. 2, Box 73, Thermal, Calif.

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AZINE

'Sportsman's Paradise' Planned . . .

COTTONWOOD — The Verde Game Protective association thinks there is no reason Verde Valley can't be a sportsman's paradise, and has launched a program to do something about it. The organization has announced it will work for: A warm water fish program for the Verde River; trout planting every year in the upper Verde; a well-managed turkey flock on Mingus; a consistent plant to improve the Mingus deer herd; a program to improve the Mingus wildlife water supply; a huntable antelope herd; an active quail program; have javelina introduced and managed; bring in a few bears "just to see one occasionally."—*Verde Independent*.

CALIFORNIA

Opposition to Park Ends . . .

COACHELLA—The Imperial Irrigation District and the Bureau of Reclamation have agreed to remove their opposition to establishment of a state park on the northwest shore of Salton Sea. The district and the federal bureau said they will no longer oppose the park if permanent buildings constructed are no closer than 220 feet to the shore line. The Coachella Valley Sports League has long been working for a recreational park on Salton Sea. In June of 1949 a group of state officials surveyed the area and were enthusiastic about its possibilities.—*The Desert Barnacle*.

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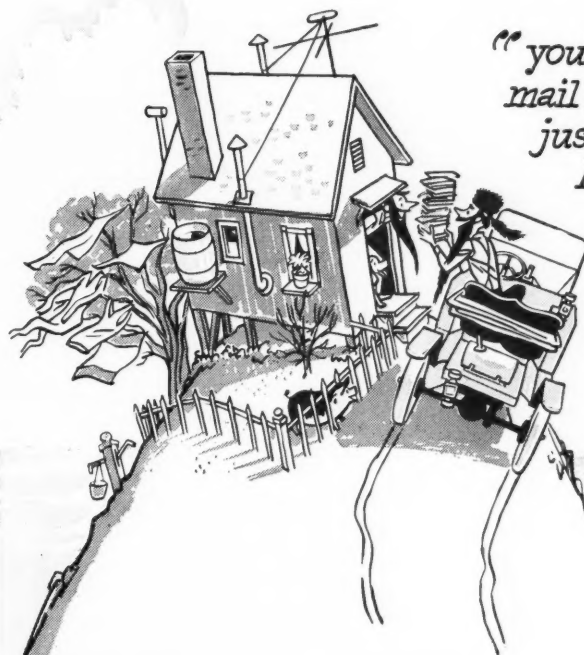
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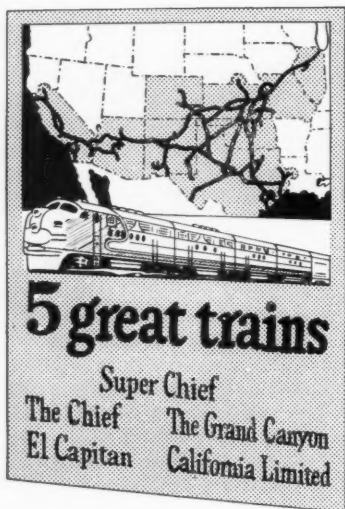
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LOS ANGELES 14
CALIFORNIA

New Desert Crop Possibility . . .

JOSHUA TREE—A hybrid yam which has all the vitamins, minerals and starches of corn may provide an industry and payroll for this desert village near the Joshua Tree National Monument. The yam is said to grow best in sandy loam, with little moisture and much sunlight. Yield per acre on poor soil is as much as 600 bushels. Experts say the climate of the Joshua desert is ideal for growing the yam.—*Banning Record*.

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Jeeps Follow Anza Trail . . .

BORREGO VALLEY—A caravan of jeeps from over southern California last month retraced the historic De Anza trail. That is, they went over that part of it from Hemet to Borrego Valley. The route followed established roads up Bautista Canyon through Anza and past Terwilliger Valley. The jeeps then plunged into the creek bottom down rugged Coyote Canyon to the Borrego Desert. It was the second annual Jeep Cavalcade over the trail first blazed by Capt Juan Bautista de Anza on his overland trek from Mexico to Monterey in 1774. It is hoped a road may eventually be built following that route through the hills, to make accessible some of the remote palm canyons in Anza State Park.—*Hemet News*.

Fishing Controversy May End . . .

BLYTHER—A long inter-state controversy over fishing privileges on the Colorado River—which forms the state line between California and Arizona—may be settled if a tentative agreement reached at Phoenix is formally approved by legislatures of both states. The trouble started when Arizona Game and Fish officers began arresting Californians fishing on Arizona side of the river without Arizona licenses. Under the tentative agreement announced in Phoenix, both states would issue stamps to be affixed to regular fishing licenses. The stamps would permit fishermen to fish in any waters of the Colorado or its lakes. A charge of \$2 would be made for the stamps.—*Los Angeles Times*.

Monument Development Outlined

TWENTYNINE PALMS—A long-range development program for Joshua Tree National Monument which contemplates improvements over the next 50 years is under consideration by the Park Service. When carried out the improvements will enhance value of the monument both for tourists and for scientists. Work now underway includes more accommodations for tourists, campers and one-day picnickers.—*The Desert Trail*.

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Indians Granted Land Parcels . . .

PALM SPRINGS—Sixty-five parcels of land have been issued in trust to members of the Agua Caliente tribe of Indians in the federal government's program to resolve the Palm Springs land controversy, according to James M. Stewart, U. S. Indian Service. Thirteen more members of the tribe were scheduled to be allotted land soon. Under the plan, individual tribe members will receive income from the land. Previously the valuable land, in the heart of the rich desert resort of Palm Springs, had been held in trust for the tribe and income went into a tribal fund. Under the new program, the tribesmen still will not have the right to sell the land, but may lease it or develop it with federal approval and receive all income.—*Indio Date Palm*.

Desert Park More Popular . . .

BORREGO SPRINGS—Number of visitors to Anza Desert State park increased from 27,942 in 1948 to 62,662 in 1949, according to final figures recently released. Agua Caliente Hot Springs State Park, not a widely known desert retreat, counted 5931 visitors in 1949.—*Imperial Valley Weekly*.

Tramway Issue Argued . . .

PALM SPRINGS—Whether the U. S. Forest Service should eliminate 320 acres of the so-called San Jacinto primitive area of the San Bernardino National Forest so that a tramway can be built from Chino Canyon, northwest of Palm Springs, to the summit plateau of Mt. San Jacinto is the issue that was argued at a public hearing April 20 in the Riverside County courthouse. The proposed multi-million-dollar aerial tramway would whisk visitors from the desert floor to two-mile-high San Jacinto in a matter of minutes, would be Palm Springs' biggest tourist and resort attraction, it is believed. Various southern California sportsmen and outdoor groups oppose the proposal, contending that the San Jacinto area is one of the few remaining primitive and unspoiled spots in the Southland, and that it should be preserved.—*Hemet News*.

Atomic Testing Station . . .

BRAWLEY—Nine hundred twenty acres of land in Imperial county adjacent to the Salton Sea has been leased by the State of California to the Atomic Energy Commission for establishment of a Salton Sea testing station. Announcement was made by Lt. Gov. Goodwin Knight, member of the State Lands Commission. The lease provides for yearly options until 1975.—*Imperial Valley Press*.

The special exhibition of Hopi Kachinas, which went on display April 1 at the Southwest Museum, Highland Park, Los Angeles, is being continued to May 19, it has been announced. The Kachinas are from the museum collection.

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Musk rats Flood Mexico . . .

CALEXICO—Musk rats who have followed the Colorado River down its course to the all-American canal in Imperial Valley were blamed for a recent break in the canal bank, which flooded a small section of land below the Mexican border. With a small

musk rat burrow as a start, water poured through until it had widened the canal break to 60 feet. The all-American parallels the Mexican border on both sides of Calexico.—*Calexico Chronicle*.

• • •

NEVADA

Discovery Anniversary Celebration

TONOPAH—Fiftieth anniversary of the discovery of Tonopah will be marked by a rip-roaring western celebration for three days May 19, 20 and 21. It was on May 19, 1900, that Jim Butler discovered Tonopah—famed as the nation's greatest producer of silver. That discovery, followed by the sensational gold strike at nearby Goldfield, revived metal mining in Nevada, stimulated both mining and stock raising in the West and ushered in an era that contributed to the rapid development of the western states.

• • •

State Fair Dates Set . . .

FALLON—September 1-2-3-4 have been set as dates for the 1950 Nevada State fair. At first meeting this year of the State Fair committee it was decided to ask commissioners of every Nevada county to provide money in their 1950 budget to finance an exhibit at the fall fair.—*Fallon Standard*.

Lehman Caves Now Open . . .

BAKER—Lehman Caves National Monument has reopened for the season and will be open to visitors seven days a week, according to Supt. Max Wainwright. Trips through the caves are conducted by park rangers each day from 9:00 a. m. to 4:30 p. m.—*Ely Record*.

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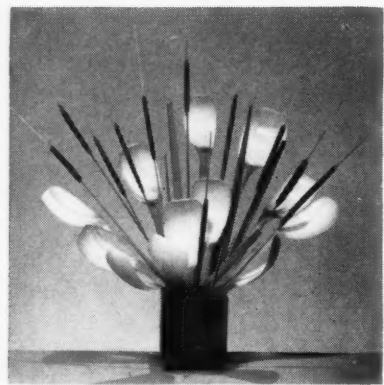
New Industry for Beatty . . .

TONOPAH—Plans for establishment of a large pumice block manufacturing plant in Beatty were announced recently here by T. M. Young. A corporation has been formed and has reportedly acquired 1920 acres of high-grade pumice in Crater basin, Nye County, about 17 miles east of Beatty.—*Times-Bonanza*.

• • •

Historic Telegraph Pole Found. . .

AUSTIN—What is believed to be the only complete pole still in existence from the original telegraph line built across Nevada in 1861, has been found by Dr. F. G. Tagert and is now on display in the yard of his Austin home. Insulators are still intact. The pole was used to build the original telegraph line, completed October 24, 1861, linking St. Joseph, Missouri, and Sacramento, California. Its construction terminated the famous Pony Express.



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Dr. Tagert found the pole and another one from which the top only was missing, in a corral fence around a haystack on the Damele ranch 30 miles east of Austin. Nearby are ruins of an old fort and ruins of the Dry Creek Pony Express station. The pole was identified by its insulators.—*Reese River Reveille*.

Good News for Fishermen . . .

LAKE MEAD—There is no longer any bag limit or possession limit on bluegill sunfish taken in Lake Mead, but the Nevada Fish and Game Commission retained limits on the lake and Arizona complied for the sake of uniformity. When Nevada authorities recently lifted regulations, Arizona followed suit.—*Holbrook Tribune-News*.

NEW MEXICO

Ghost Town May Live Again . . .

LORDSBURG—The abandoned mining town of Tyrone, New Mexico—which today is a ghost town with empty hospital, school, railway station and office buildings—may come to life again. Drilling tests are being made at the old copper mine site and if these prove satisfactory it is probable that the old Tyrone copper mine may again be humming with activity. But this time it will be an open-pit operation, not a shaft mine as it was when the mine closed in 1921. It was in 1912 that the Tyrone region was developed, and almost overnight a town of 5000 population was born. Tyrone was a planned mining town, the massive buildings comprising the town proper cost more than a million dollars.—*Lordsburg Liberal*.

Quarter Century of Service . . .

GALLUP—Nearly a quarter of a century of service to the Navajo Indians will come to an end for Dr. and Mrs. C. G. Salsbury when they retire May 25 after 23 years at Ganado Mission on the Navajo reservation in Arizona. In that span of years Ganado Mission has grown from a few rude huts to an institution known nationally. Dr. Salsbury is recognized as an authority on the tribesmen and their

language. In appreciation of the work done by the Salsburys, a group of leading men in the Indian country have organized the Salsbury Appreciation Fund and are making plans for a formal presentation ceremony when the beloved couple will be honored. Joseph Poncel of Tucson, Arizona, has been named to succeed Dr. Salsbury as general superintendent of the Ganado Presbyterian Mission.

Irrigation for Navajos . . .

WINDOW ROCK—Congressional authorization of the long-discussed San Juan irrigation project would provide gravity flow water for 124,000 acres of Navajo reservation land which is under the proposed Martinez dam near the Colorado-New Mexico border, according to Allan G. Harper, superintendent of the Navajo agency. This authorization will be sought vigorously, Harper said, before summer. The land would provide a good living for an estimated 2600 Indian families.—*Gallup Independent*.

New Game Bird Considered . . .

SANTA FE—Southern New Mexico regions are being surveyed to see if the Asiatic chukkar partridge will thrive there. The U. S. fish and wildlife service and the state game department are cooperating in the survey. Dr. Gardner Bump, wildlife service naturalist, expects to go to India soon after completion of the local survey to study the birds, hopes to find areas in southern New Mexico and Arizona which will be suited to partridges.—*Gallup Independent*.

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News for Photographers . . .

GALLUP—A unique free service for amateur photographers has been inaugurated by the Gallup chamber of commerce. The chamber has established a Phototour department offering escorted daily photo-tours with competent photographer-guides to major points of interest in the famed Indian country surrounding Gallup. New Mexico offers exceptional picture subjects and also presents unique picture-taking conditions. Free information on both is offered. Details may be obtained by writing the Phototour Department, Chamber of Commerce, Gallup, New Mexico.

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Indian Traders Choose Secretary

GALLUP—Officers and directors of the United Indian Traders association recently employed Ed Ford, Flagstaff, Arizona, as secretary-treasurer of their organization. He succeeds M. L.

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Woodard, who resigned to become general manager of the Gallup Independent. Woodard has also been main cog in staging the annual Inter-Tribal Indian Ceremonial each summer at Gallup.—*Gallup Independent*.

UTAH

Students Shoot River Rapids . . .

MOAB—Six University of Utah students—five of them U. S. navy midshipmen—successfully ran the rapids of the Colorado river from Grand Junction to Moab in a 10-man navy rubber landing craft. Their most exciting moments were in the Westwater

Canyon rapids. They came through without serious mishap, but were drenched to the skin many times. The young men made a leisurely trip from Saturday to Tuesday. In Westwater Canyon, a deep gorge with cliffs rising vertically, there is a right-angle bend known as Cisco bend. Here the most hazardous water was encountered. At one point one of the men was thrown from the rubber craft, but managed to cling to a rope until quieter water was reached.

Of great interest to the students was an old camp they discovered in a cave in the canyon. Two beds, cooking utensils and supplies were intact, although badly weathered. Some letters left in the camp were postmarked 1903, indicating the camp had been undisturbed for nearly 50 years. Occupants of the camp were prospectors, signs indicated.

In the group shooting the rapids were: Paul Geerlings, Bruce Martin, Richard Cutler, Ed Kearfott and Richard Sklar.—*Moab Times-Independent*.

To Photograph Utah Bridges . . .

RICHFIELD—Harry Aleson and Charles Larabee have announced that they are forming a party for a boat run through Grand Canyon from Lee's Ferry to Boulder City this season. They are also organizing an expedition for a trip down the Escalante River and thence through Glen Canyon to Lee's Ferry, starting June 4 and ending June 15. They expect to record and photograph some natural bridges which have not been previously publicized.

Utah Snow Pack Encouraging . . .

LOGAN—Surveys on most of Utah's snow courses, taken before the spring melting, indicated that the state's water supply outlook varies from excellent in the northern and northeastern part to about normal in the central and southern regions. In making the surveys, both depth of the snow and its water content are measured. Prior to the spring run-off, total water stored in all reservoirs was 9

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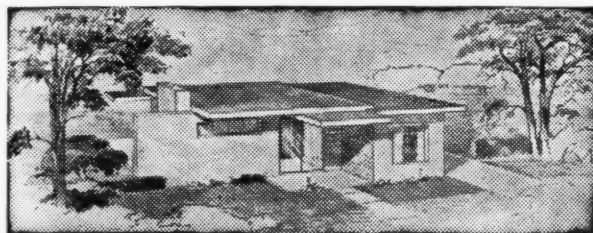
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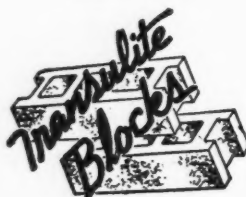
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percent more than last year and 43 percent above the last 10-year average. One exception is the Antimony-Widtsch-Escalante area, which in March had only about 50 percent of average water supply on the watersheds.—*Salt Lake Tribune.*

ANSWERS TO DESERT QUIZ

Questions are on page 18.

- 1—Death Valley.
- 2—In the sun.
- 3—Apache Trail.
- 4—Coal.
- 5—Devil or evil spirit.
- 6—Tucson.
- 7—Quartz and feldspar.
- 8—Dellenbaugh.
- 9—The Colorado River.
- 10—Road or highway.
- 11—Purple.
- 12—Along the road to the Natural Bridges.
- 13—San Francisco Peaks.
- 14—Lizard.
- 15—Apaches.
- 16—Yuma.
- 17—Underneath the sand.
- 18—Corn.
- 19—Opals.
- 20—Apaches.

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1960-B

MINES AND MINING . . .

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. . .

Banning, California . . .

This San Geronimo Pass city has experienced a mild gold rush. Claims were filed rapidly following discovery of a large deposit of low-grade ore east of Banning. According to George Wallace, Beaumont assayer, it is free gold mixed with iron pyrites. The deposit is described as a bed vein of enormous tonnage. As a whole it is low grade. The claims are near water, good roads and railroad siding. Power lines are within two miles.—*Banning Record*.

. . .

Tonopah, Nevada . . .

Twenty tons of exceptionally rich ore went to McGill recently from the Desert Queen shaft on the Tonopah-Belmont property which is under lease to Ornelas and Holladay. The partners report they are still working on rich ore and are accumulating another shipment.—*Times Bonanza*.

. . .

Ely, Nevada . . .

Mounting interest in oil prospects in Nevada is indicated by the fact that more than 85,000 acres of public domain has been taken up under oil leases by major companies in the past few weeks. Largest blocks of land are in Jake's Valley and in both north and south Long Valley. Around larger blocks of land already leased, smaller leases are being snapped up. Geologists, engineers and land men are arriving in Ely daily.—*Ely Record*.

. . .

Virginia City, Nevada . . .

Development of the ore body discovered about a year ago on the 800-foot level of its Keystone property in the Comstock Lode is being pushed by Dayton Consolidated Mines. The vein is reported to be the continuation of the ledge mined in the 700-foot workings, and is considered one of the best ore bodies located on the Lode in many years. Ore is reported to be good mill grade.—*Los Angeles Times*.

Marysville, Utah . . .

Establishment of a purchase depot at Marysville for the purchase and stockpiling of uranium-bearing ores recently discovered in the area has been announced by the Atomic Energy Commission. The depot is to be operated for the commission by the American Smelting and Refining Company, which also operates the AEC ore-buying station at Monticello. Uranium deposits near Marysville are of the autunite-torbernite variety and cannot be treated by the process used in the commission's plant at Monticello. The surface ores in the Marysville district are generally low grade.—*Garfield County News*.

. . .

Searchlight, Nevada . . .

An apparently extensive gold deposit in the Searchlight area has been discovered, according to L. O. Hawkins who made the announcement in Las Vegas. Prospecting has disclosed both low grade and high grade ore, he said, and the gold-bearing formation has been traced over an area some two miles wide and four miles long. Hawkins and associates have leased or optioned the claims and located six more adjoining the main property. They think it may become one of Nevada's big gold mines. The famed Quartette, Duplex and other gold properties were major producers in the area about 45 years ago, and gold was mined in the Searchlight district and adjacent El Dorado Canyon before the Civil War. High grade quartz was taken from shallow workings. — *Los Angeles Times*.

. . .

San Francisco, California . . .

"Perlite Deposits in Sonoma County, California," and "Geology and Tungsten Deposits of the Tungsten Hills, Inyo County, California," are two of the chapters in latest issue of the *California Journal of Mines and Geology*, published quarterly by the California Division of Mines. In addition to other chapters on mines, mineral resources and geology of the state, there are charts, maps and halftone illustrations and the annual report of the state mineralogist.

The *Journal*, plus other informative publications on mining operations, discoveries, markets and statistics, may be obtained by writing to: Department of Natural Resources, Division of Mines, Ferry Building, San Francisco 11, California. Latest issue of the *Journal* is Vol. 46, No. 1.

Tucson, Arizona . . .

Open veins of ore—principally fluorospar and opticalspar—are being worked at the Fluxore mines in the Sierrita Mountains 25 miles west of Tucson following recent formal reopening. A modified strip method is used to work the diggings, ore is gravity fed to trucks for transportation to the processing plant.—*Tucson Daily Citizen*.

. . .

Yuma, Arizona . . .

Discovery of uranium oxide ore on his lode claim in the Trigo Mountains 50 miles north of Yuma has been reported by R. Peters, prospector since 1911. Samples of the ore sent to Tucson metallurgical branch of the U. S. Bureau of Mines resulted in a report that the ore contained .05 per cent U-308. Peters said there is a large body of the ore on his property. It contains lead, nickel, gold, copper and uranium oxide. The Atomic Energy Commission is scheduled to inspect the mine.—*Yuma Daily Sun*.

. . .

Auburn, California . . .

The Red Point Mine property in Placer county, reputed to have produced more than a million dollars in gold, has been sold for \$20,200. Successful bidders were William Hughes and Winifred Akins of Forest Hill. The property was sold by order of the superior court. — *Battle Mountain Scout*.

. . .

Hayden, Arizona . . .

Despite its more than 50 years of copper production, the area around Hayden is beginning to take on many of the aspects of a new mining region as new ore bodies are being developed. Increased mill and smelter capacity is under construction and field parties are out looking for more ore.—*The Mining Record*.

. . .

Angel's Camp, California . . .

Mining of a profitable gold vein in south end of the famed Royal mine near Todson is reported by Frank Tower and associates. Ore is milled in a 10-stamp mill. Thirty-nine pounds of bullion worth about \$14,000 was shipped recently and 40 tons of concentrates have been trucked to a custom smelter.—*The Pioche Record*.

. . .

McKinley County, New Mexico . . .

A third oil exploration has been started in the Hospah dome field in northeastern McKinley County. Latest drilling is by the Spanish Bit Oil Company, a group of Albuquerque businessmen. The new exploration is about five miles southeast of the closest producing well in the Hospah pool.—*Gallup Independent*.

Gems and Minerals

COACHELLA VALLEY SHOW CALLED 'GREAT SUCCESS'

"One of the great gem and mineral shows of the West" was the consensus of those who attended the Coachella Valley Mineral society's show March 10, 11 and 12 at the Riverside County fairgrounds, Indio, California. More than 5000 visitors came to see more than 50 collections of gems and minerals from many states and several foreign countries. In addition there were excellent commercial exhibits of lapidary equipment. John Hilton, author-artist-rockhound, exhibited the much-publicized green beryl crystal found recently by prospectors in the Riverside county desert. It weighs more than 14 ounces. O. A. Rush was general chairman of the show.

WINTER FIELD TRIPS KEEP ARIZONANS ON THE GO

A series of field trips during February and March kept members of the Mineralogical Society of Arizona, Phoenix, on the go several weekends. Highly successful was the outing to the Woodpecker mine in Pinal county, where company officials told the rockhounds to help themselves to any material they could find. After lunch some members went to the nearby Ajax mine for more specimens. The trip to Pinnacle Peak saw more than 30 members collecting white and rose quartz. Others were interested in early wildflowers, snakes and a prehistoric Indian site where they collected artifacts. On March 12 a group went to Canyon Lake for agate, chalcedony, geodes, hollow quartz and scepter quartz crystals. March 26 there was a joint field trip with the Tucson Gem and Mineral society to the open pit mine at Ajo.

May 21 has been announced as the date for the third annual field trip of the Curry County Mineralogical society, Gold Beach, Oregon, up the famous Rogue River. The trip will cover about 75 miles by boat. Visitors are welcome to join the trip, should make reservations by writing to Lottie Shields, secretary, P. O. Box 325, Gold Beach. Cost is nominal. It is a one-day trip. No stops are made going upstream over riffles and rapids, but coming downstream stops are made at all likely looking gravel bars.

New officers are now heading up activities of the Yuma, Arizona, Gem and Mineral society and an interesting year is developing. Principal event for this fall will be a gem and mineral show. Society officers are: Jack Reed, president; Marion Koogler, vice president; Katherine Mueller, secretary-treasurer; Pauline Lohr, publicity and librarian.

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As a special surprise treat for the society's fourth birthday party, Dr. J. R. Hudson of Dayton, Ohio, flew to Chicago to speak before the Chicago Rocks and Minerals society February 11. Dr. Hudson talked on faceting, and demonstrated his skill and technique during the lecture. He also displayed a collection of sparkling faceted stones. Roy Olson, a recent society member, provided a display of opals from many parts of the world. At the same meeting Joseph W. Kozisek, student mineralogist, demonstrated his pocket-size field kit which he uses to identify field specimens.

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April 1, 1950

EDITOR DESERT MAGAZINE:

We would like to announce that a brand new store was opened to the public and rock-hounds in particular at 800 Sebastopol Road, Santa Rosa, California under the name of GEM-JEWELS with a policy of fair play to the customers that will stand the test in the scales of justice.

The store is operated by Arthur Benny who has been a manufacturing jeweler for many years and W. H. Russell who is just another rabid rock-hound.

We wish you would tell the folks that as a get-acquainted offer we will send prepaid, with no strings attached, a nice slab of agate or jasper, enough for a couple of nice cabs to anyone sending his name and address stating his preference. A card will do.

You might also say that we will send one-half pound of tin oxide, optical grade, for 60 cents plus 15 cents postage. We have only 500 lbs. at this price and want to spread it around as far as possible. We also have some fine, I really should say extra fine, jasper at 35 cents a pound in 5 lb. lots. Postage extra please. And some very nice wonder stone at 35 cents a pound in 5 lb. lots, plus postage of course.

Now about this jade controversy: It seems rather amusing to us the claims that are made by some of the people regarding their "Jadelike" material. Here is what we have to offer for your cutting pleasure: Some wonderful translucent material running in color from almost white to very dark green that has been pronounced jadeite, nephrite and vesuvianite.

Regardless of what it is, it is very beautiful stone and we offer it in slabs 2 inches by 1 inch by 3/4 inch thick for \$1.50 prepaid. For the want of a better name just ask for California jade. It's really nice. You'll like it.

You might close by saying that we always try to handle . . .

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Arthur Benny

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ATTENTION ROCK COLLECTORS. It will pay you to visit the Ken-Dor Rock Roost. We buy, sell, or exchange mineral specimens. Visitors are always welcome. Ken-Dor Rock Roost, 419 S. Franklin, Modesto, California.

MINERAL SETS—24 Colorful Minerals (identified) in 1x1 compartments—Postage paid, \$3.50. Prospector's Set of 50 Minerals (identified) in 1x1 compartments in cloth reinforced sturdy cartons. Postage paid \$5.75. Elliott's Gem Shop, 26 Jergins Arcade, Long Beach 2, California.

RUTILE, brilliant cut, at a new low price. Complete stock of all gem stones. Complete professional lapidary service. Ace Lapidary, Box 67, Jamaica, New York.

MINERAL SPECIMENS and cutting material of all kinds. Gold and Silver jewelry made to order. Your stones or ours. 5 lbs. good cutting material \$4.00. J. L. James, Box 117, Carson City, Nevada.

IF YOU ARE A ROCKHOUND you need the Lapidary Journal. Tells how to cut and polish rocks, gives news of all mineral-gem groups. Tells how to make jewelry, carries ads of dealers in supplies, equipment, gems, minerals from all over the world. Well illustrated, beautifully printed. Subscription \$2.00 a year—back numbers 50c. Sample Copy 25c if you have never subscribed or been sampled. LELANDE QUICK, Editor, P. O. Box 1228, Hollywood 28, California.

JUST RETURNED from one of the most colorful Agate fields in the world. Have a fine selection of clean cutting material. True Carnelian, mosses, banded, patterns in many colors, tubes, plume, Texas red and black plume. Rickolite and Honey Onyx, fine for book ends, spheres, etc. Also some beautiful white Aragonite, fibrous masses and crystals, all shapes and sizes. Make your next rock hunting trip in our yard and save money. Good material as low as 25c lb. Geo. C. Curtis, The Agate Man, 645 First St., Hermosa Beach, California.

MONTANA MOSS AGATES in the rough for gem cutting \$1.50 per lb. plus postage. Also Slabbed Agate 25c per sq. in. (Minimum order \$1.00). Elliott's Gem Shop, 26 Jergins Arcade, Long Beach 2, California.

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MONTANA AGATE SLABS, from Yellowstone Valley. Red and black in different shades and patterns. Scenic, mossy, banded, etc., in clear agate. Write for prices. PAUL FRY, Rt. 1, Box 115-A, Miles City, Montana.

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OREGONITE SPECIMENS for sale by owner of only known deposit. \$1.50 each. Orders not accompanied by remittance mailed C.O.D. BARNES JEWELRY, 515 H. Street, Grants Pass, Oregon.

FIFTY MINERAL SPECIMENS, 3/4-in. or over, boxed, identified, described, mounted. Postpaid \$4.00. Old Prospector, Box 21 Dutch Flat, California.

FOR SALE: Beautiful purple Petrified Wood with Uranium, Pyrolusite, Manganite. Nice sample \$1.00. Postage. Maggie Baker, Cameron, Ariz.

IN NEW LOCATION: Having bought the entire stock of Martin's Mineral Mart, equipment and lapidary supplies, fine mineral specimens, varied cutting materials field run and slabs, also their fine line of quality finished jewelry and solid gold and silver mountings, we have moved our shop from Davis to Gilroy and extend a welcome to Rockhound friends of Jack Martin and to all customers, old and new, who love rocks. Will be open every day except Monday. Shall give careful attention to mail orders and custom cutting. Write us about our introductory specials of genuine Indian arrowhead tie clasps and stick pins, also Morgan Hill orbicular Jasper. Jake's Mineral and Rock Shop, Rt. 2, Box 14, Gilroy, California, on Highway 101.

ARIZONA AGATES richest colors in moss, ferns, plumes, flowers, inlays, curly, picture, calico, scenic, banded, iris, variegated moss and hundreds of designs; Sawed slices 50c to \$5.00 each; orders filled in 30 to 60 days; Approval orders now filled. Arizona Agate Mines, Cave Creek, Arizona.

TREMALITE: In fine grained Calcite, interwoven. A very enhancing specimen for your collection. Sizes \$2.00 to \$6.00 each. Jack The Rockhound, P. O. Box 86, Carbondale, Colo.

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AMONG THE ROCK HUNTERS

EMMETT, IDAHO, FOLKS ORGANIZE MINERAL CLUB

Starting out with 46 members—and the list still growing—the Gem County Rock and Mineral Society has been organized at Emmett, Idaho. Meetings are the third Friday of each month, with field trips scheduled the Sunday following each meeting. Officers of the new society are: Gene Brookins, president; A. R. Albee, vice president; K. McCoy, secretary; Mrs. A. R. Albee, treasurer; Alfred Perry, publicity director; Verl Marchant, field marshal.

June 10 and 11 have been announced as dates for the annual show of the Long Beach (California) Mineral and Gem Society. The show will be in Sciots hall, 1005 East Sixth Street, Long Beach. February field trip of the society was to Chuckawalla Springs. More details of the annual show will be announced next month.

Two groups of about 35 members of the Dona Ana County (New Mexico) Rockhound Club enjoyed March field trips in the mountainous area near Tonuco Mountain. They found jasper and several varieties of quartz. Two of the more adventuresome boys located an interesting Indian ruin and found a number of artifacts.

The Texas Mineral Society, which meets the second Tuesday of each month at the Baker Hotel in Dallas, discussed fluorescent specimens at the regular March meeting. Many members brought specimens which were shown under lights. There were several visitors.

New officers of the Gem Cutters' Guild, Los Angeles, were elected at a recent meeting. Officers are: C. A. Terry, regent; E. H. Pauls, marquis; Millicent Terry, tablet; H. L. Chapman, cuvette; Ted Alsbach, baquette; Audry Baum, keystone.

March field trip of the Mineralogical Society of Southern California, Pasadena, was to Mule Canyon. It was an over-night trip, and next day the group visited a new find of selenite crystals. Members also collected satin spar, petrified wood and agate.

A different kind of "field trip," on which collecting was definitely banned, was tried out by members of the East Bay Mineral society, Oakland, California, on January 22. It was a progressive field trip, with small groups visiting the homes of four or five fellow members to see their collections. Regular meeting of the society was January 19, when Robert Winston of the College of Arts and Crafts explained how he finds his inspiration for modern jewelry in observing nature's designs. The lecture was illustrated with color slides.

"Romance of Jade" was topic of a talk given by Chang Wen Ti when he spoke recently before the Delvers Gem and Mineral society, Downey, California. The speaker, an authority on jade, said the Chinese have for thousands of years valued jade above all other gems. Some members of the Downey society planned to accompany the Mt. San Antonio Agateers of Pomona on a field trip in March to the Cargo Muchacho Mountains near the Mexican border.

SANTA FE NOW HAS GEM, MINERAL CLUB

A gem and mineral club has been organized in Santa Fe, New Mexico, with regular meetings scheduled the third Tuesday of each month at 7:45 p.m. in the chamber of commerce rooms, 114 Shelby street. Organization was completed with election and installation of the following officers: Walter H. Wright, president; James G. Gates, vice president; Lucile R. Skewes, treasurer; J. Hobson Bass, corresponding secretary; Bettie A. Morgan, recording secretary. Field trip chairman is Fred H. Wilson. Visitors are welcome at all meetings.

Classification of gems by the use of modern instruments and by other methods was explained and demonstrated by B. H. Shields Jr. of Fresno when he talked at March meeting of the Sequoia Mineral society. The meeting was held at Parlier, California. Shields is a certified gemologist, there are said to be less than 100 certified in the United States.

A series of informative talks was enjoyed by members of the Tucson, Arizona, Gem and Mineral society at meetings in February and March. A motion picture early in February showed the process of growing quartz crystals. Don Bryant from the geology department of the University of Arizona gave a talk on sedimentary rocks on February 21. The state museum of Arizona sponsored a talk by Dean B. S. Butler on February 14, while on March 7 David Record discussed cutting and polishing gem materials. Regular meetings are the first and third Tuesdays of each month in room 106 of the State Museum building on the University of Arizona campus. Visitors are always welcome.

Some 50 members and friends attended the February meeting of the Wasatch Gem society, Salt Lake City, when various members displayed fine specimens. Speaker was Jack Culbertson, who told of finding Wyoming Jade. He and Mrs. Culbertson brought a valuable display of polished stones and a large card of jade specimens.

March meeting of the San Geronio Mineral and Gem society, Banning, California, was held in the high school study hall. Success of the society's display at the Coachella Valley show was discussed. Paul Walker is president of the San Geronio society.

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DAILY SIDE TRIPS PLANNED AT EL PASO

Rockhounds attending the Rocky Mountain Federation show June 7 to 9 at El Paso, Texas, need not put in all their time looking at exhibits and displays. The El Paso Mineral and Gem society is planning daily side trips to areas of interest, and in addition has announced that collectors may bring their rocks to swap or sell.

"America's Third Largest Hobby" was subject of a talk given by Leland Quick, editor of the Lapidary Journal, at April meeting of the San Diego Mineral & Gem society. He spoke in the natural history museum, Balboa Park. The society is now making plans to display an outstanding collection of cut and uncut gems and minerals at the San Diego County fair, Del Mar, June 29 to July 9, and will also sponsor a complete lapidary demonstration.

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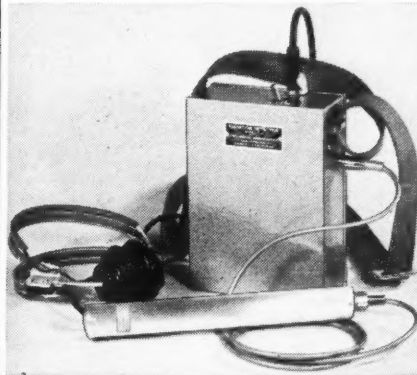
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Only \$62.50 complete with 3 index plates. You can cut any faceted form quickly and easily. The equal of faceters costing twice the price.

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Drills finest holes at high speed and saws discs up to 1 1/2". Exclusive ramrod action prevents core plugging. Fully automatic. \$68.80

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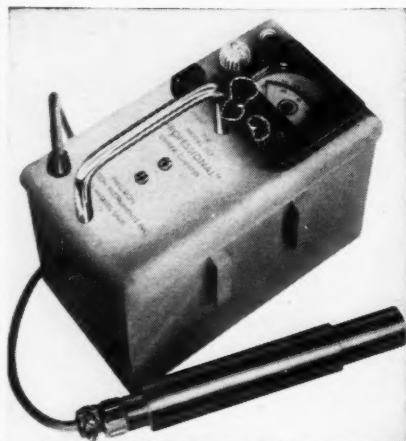
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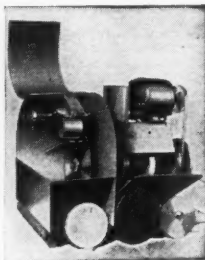
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COLISEUM OBTAINED FOR ROCKY MOUNTAIN SHOW

The largest convention building in El
Paso, Texas, has been obtained for the
Rocky Mountain Federation Mineral and
Gem show which is to be held June 7, 8
and 9. More space than is needed will be
available, and trucks and cars may drive
right into the Coliseum to unload display
tables, equipment and materials. Parking
space is available in an enclosed area. A
record number of exhibitors is expected,
and a record crowd of visitors.

Officers of the Tacoma, Washington,
Agate club have been installed for the
1950 year and active months ahead are as-
sured. Officers are: Al Bowman, president;
Ralph Pommert, vice president; Bertha F.
Gilbert, secretary; Joe Zimmerman, treas-
urer. George Gilbert is acting editor of the
club's publication, The Puget Sounder, and
Charles Wible is publisher. Meetings are
held the first and third Thursdays of each
month at St. John's Episcopal church in
Tacoma. The second Thursday of the month
members visit Madigan hospital, take speci-
mens of jewelry, polished material, fluo-
rescents and other displays for the enjoy-
ment of veterans in the hospital. The club's
program chairman is Ralph Pommert.

A session on identification of mineral
specimens, a library meeting and a social
affair kept members of the Northern Cali-
fornia Mineral society, San Francisco, busy
and interested during March.



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RAND DISTRICT GROUP HAS NEW HEADQUARTERS

"Grand Opening" of the new headquar-
ters of the Rand District Mineral and Gem
association, on Butte avenue in Randsburg,
California, was celebrated April 8 and 9.
Short field trips and visits to local mines
were arranged to round out a full program
and the Randsburg Museum was open on
Saturday and Sunday. Some of the visiting
rockhounds who stayed overnight attended
Easter services at the Methodist Community
church and the Catholic church.

The Rand District group has a full sched-
ule of field trips planned through this
spring, summer and next fall—some of them
overnight trips to cooler mountains for
July, August and September.

First annual exhibit sponsored by the
Tourmaline Gem and Mineral society was
held at Porter Park, La Mesa, California,
on April 23. Some 20 members of the
society contributed exhibits. These included
minerals, polished slabs and nodules, lapi-
dary work, fluorescent material and silver
work. Benjamin Brittin was chairman of the
show committee.

March field trip of the Fallon, Nevada,
Rock and Gem club was to a new location
ferreted out by George Hathaway and Alva
Gaylord, veteran rockhounds. A hot lunch
was served to those who made the trip.
The club is still growing, has added two
new members, raising the total to 30.

A program in which Dick Ells showed
different ways of casting as the jewelry
trade people do it highlighted the March
meeting of the Los Angeles Lapidary so-
ciety. He climaxed his talk with several
demonstrations. The society had an exhibi-
bit at the Hobby show in the Shrine Con-
vention hall March 24 through April 2.

Ernest E. Michael, president of the Yava-
pai Gem and Mineral society, Prescott, Ari-
zona, spoke on cutting and polishing gem
stones when he talked at March meeting
of the society. A potluck supper preceded
the meeting. Michael has one of the state's
best collections of gem stones, brought
specimens to the meeting to illustrate his
talk. He exhibited zircon, California jasper,
Montana fern agate, flowering obsidian,
malachite, synthetic rubies, Wyoming agate
and Arizona jasper.

The Feather River Gem and Mineral
society, Oroville, California, now has a new
meeting place, in basement of the Thermo-
lito school. Meetings are the second and
fourth Fridays of the month.

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JADEITE REPORTED FOUND IN CALIFORNIA

Jadeite, a mineral of the jade family, has been discovered in San Benito County, California—the first discovery of the mineral in this country, according to Dr. H. C. Dake, recognized mineralogist. Dr. Dake said the late L. P. Bolander Jr., Oakland, made the discovery. Bolander died in February while exploring the mountains in his search for jadeite. Identification of the mineral as jadeite was made by Dr. Austin F. Rogers, formerly of Stanford university, and George Switzer, associate curator, division of mineralogy and petrology of the Smithsonian Institute. Jadeite is found principally in upper Burma.

ROCK GROUPS VISIT TURTLE MOUNTAINS

Frank and Jesse Craik (*Desert*, July '48) long-time residents of Lost Arch Inn in northern section of the Turtle Mountains—which sprawl across California's Mojave desert—were cheerfully helpful when members of the San Fernando Valley Mineral and Gem society and the Coachella Valley society went on a joint field trip into the Turtles recently. The remote camp is in a desert wonderland for rockhounds and botanists—and lost mine hunters.

FEATHER RIVER GROUP PLANS ANNUAL SHOW

June 4 has been set as the date for the annual gem show and picnic of the Feather River Gem and Mineral society, Oroville, California. The show and picnic will be at the club grounds, Fifth and Shasta, in Thermalito. The Feather River Camera club is cooperating with a photographic exhibit. Two interesting meetings were held in April, with designated members arranging exhibits at each meeting.

An unusually interesting talk on "The Building Blocks of Mineralogy" was given by Eldred Anspach, Los Angeles County chemist, at March meeting of the Los Angeles Mineralogical society. He discussed the elements that constitute the earth's crust and told how some minerals are formed. The speaker also traced development of the modern theory of the structure of atoms. March field trip was to the Crestmore quarry in Riverside County where opalite, xanthophyllite, wollastonite, spinel and idocrase were collected.

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Discovered in the desert area of Riverside County, California, a 14½-ounce green beryl has been termed by rock experts one of the best gem finds made in the state in the past quarter century. The gem was mined by two young men who sold it to John Hilton, desert artist, author and gem collector. He said he does not know location of the mine.

Members of the Santa Monica Gemological society in March deserted their sea coast atmosphere for a field trip to Opal Mountain, near Barstow in the Mojave desert. At the March meeting A. B. Micklejohn, mining engineer and past president of the Los Angeles Lapidary society, gave a talk on "Gemology." C. E. Hamilton is president of the Santa Monica society.

Annual banquet and election of officers was the big event in March for members of the Minneapolis, Minnesota, Mineral club. The meeting was held at the Curtis hotel. Ben Hur Wilson, Joliet, Illinois, author and lecturer, talked on "Educating Our Younger Generation in the Earth Sciences." On April 16 the club sponsored its annual exhibit at the hotel.

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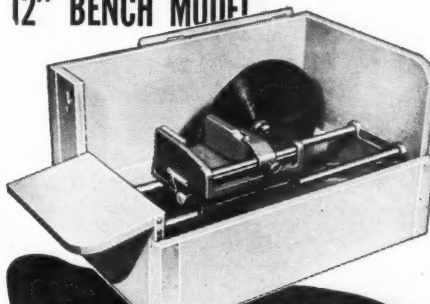
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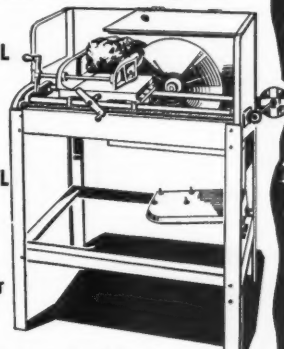
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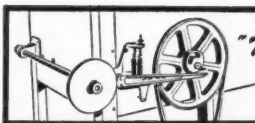
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An area rich in minerals, cutting material and history was visited by members of the Searles Lake Gem and Mineral society, Trona, California, when they went in March to Calico. The town of Calico is in the Calico Mountains 12 miles east of Barstow and four miles north of Yermo. Rugged scenery also characterizes the district, with Odessa Canyon one of the main points of interest. Preparations are speeding up meantime for the California Federation gathering June 17 and 18.



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NEW SOCIETY FORMED AT PARADISE, CALIFORNIA

Organization of another new rock group has been completed with election of officers of the Paradise (California) Gem and Mineral club. Serving during 1950 are: Oliver Clough, president; C. E. Snyder, vice president; S. R. Snyder, secretary; Earl S. Wheeler, treasurer; Jessie Clough, librarian; Roy H. Serdahl, Ernest Brown and George Asay, directors. Meetings are held the second and fourth Tuesdays of the month at Odd Fellows hall on Elliott Road in Paradise. Visitors are always welcome. Thirty rockhounds have already had their first field trip, a hike through the mud to collect petrified wood. Some fine green opalite was obtained and one fine specimen was labeled Specimen No. 1 of the club collection. Paradise is in Butte County.

ESSAY CONTEST FOR JUNIORS ANNOUNCED

The American Federation of Mineralogical Societies has announced another earth-science essay contest for juniors. The contest will end October 15. It is open to boys and girls under 20 in United States and Canada who are not yet in college. Articles may be on minerals, fossils, gems, geology or any other earth science subject. Entry blanks will be sent upon request. Write to Prof. Richard M. Pearl, Colorado College, Colorado Springs, Colorado.

The Gila Valley Gem and Mineral Society, Arizona, entered an attractive display in the Maricopa Lapidary show at Phoenix March 11 and 12, and members are now preparing for the Rocky Mountain Federation convention and show to be held in El Paso this June.

Following a collecting trip in the Opal Mountain area February 26, members of the Pomona Valley (California) Mineral Club enjoyed at their March meeting a program of colored slides shown by Nancy Taylor covering scenic highlights of the Southwest.

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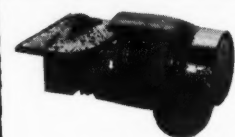
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MORE DETAILS ABOUT CONVENTION AT TRONA

All member societies of the California Federation of Mineralogical Societies have received full information on the rules governing society displays and the rules and classes to be used in judging individual displays entered in competition at the 1950 Federation convention which will be held June 17 and 18 at Trona—in the heart of one of the state's best collecting areas. Arrangements are being made for ample camping facilities and trailer space at Valley Wells, popular picnic spot a few miles north of Trona. Individuals who want to enter displays may get additional information from Ralph W. Dietz, display chairman, by writing to 108-B Byrnes, China Lake, California.

An estimated 2000 persons attended the second annual mineral and gem show of the Mineral and Gem Society of Castro Valley, California, March 18 and 19. Members of the society had 24 exhibits. Special displays and demonstrations rounded out the show. Buster E. Sledge was general chairman. One of the most interesting exhibits was that of the Boy Paleontologists of Hayward, also known as "The Gordon Boys," who displayed some of the fossils they have discovered in excavations at Livermore. The 13 young men of high school age under the leadership of Wesley Gordon have made 245 trips to the site since beginning their work in 1944. Among specimens on display was the most complete skeleton ever found of a certain extinct Pleistocene camel, including the upper and lower jaws, seven cervical and the seventh lumbar vertebrae. There was also a fragment of a 5-foot mammoth tusk which contains an arrangement of crystals on the inside formed by percolating waters in the same way that similar minerals were deposited in the limestone caves of New Mexico.

The Clark County (Nevada) Gem Collectors, Inc., has outlined a full program for the spring months, starting with a field trip and a potluck supper in April. For May the program includes: field trip on Saturday, May 13, to a location of fossil fish and Indian artifacts; on Friday evening, May 26, a business meeting at the home of Cortez and Wilma Cooper in Boulder City, with program and refreshments. For June: field trip to the California Federation show at Trona, on June 17 and 18.



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AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

For some time now we have been claiming that gem cutting is America's "third largest doing hobby" and we have been able to offer sound arguments that this is so. Developments in the last year are supplying almost daily proof that our reasoning is right. While we have not been puzzled about this, we were suddenly struck with some facts in a speech we heard recently that was like a bolt from the blue.

We were listening to Dr. Theodore Klump, head of one of the largest pharmaceutical manufacturing firms in the country and, in our opinion, the greatest executive in that business today. He has been making a study of old people, or shall we be tactful and call them "our senior citizens."

The burden of his talk dealt in statistics but statistics are not always boring when they are easily understood and it happens that these are. "In 1980," said Dr. Klump "the estimate by our best authorities indicates that this country will have a population of 214 millions. Of this population 66 millions will be age 65 and over and another 24 millions will be between 45 and 65. To retire these citizens on \$100 a month, plus administrative costs, will cost about \$38 billions a year. There will be more women than men, although more male babies are born than females. But this is true of all species and has always been so. Every young man and woman will have an old person on their back, etc. etc."

This department has nothing to offer on the economic problems of the nation but we personally recognize these facts to be true. Our concern is not with the economic problems but with the human values of these old people. It is also estimated that, in order to provide jobs for the young folks who will carry the old folks, that work will have to be divided so that no one will work more than 30 hours a week. In 1900 almost every one worked 70 hours a week—and they worked until they died.

So many people are now reaching the retirement age as "lost souls" that we know of one large corporation that is undertaking a program of educating their employees to retire. They begin at age 60 by making them take off one day a week and then two days a week when they're 61, etc. By the time they are 65 they have adjusted themselves to complete retirement but they have also, through company education for it, adjusted themselves to a happy retirement time.

The answer to all this is—interests. Since most interests are pursuits of some kind and since pursuits of endeavor with no wage incentive are usually hobbies, then hobbies are going to play an increasingly important part in the life of this nation for the rest of this century. Science has demonstrated that work is conducive to longevity. Youth contents itself most of the time with the opiate of dreams but when a man reaches 65 he has no pipe dreams and he wants something real. Activity is real and work is activity so that the secret of his further survival is doing work that he wants to do when he no longer has to indulge in work that he previously had to do. "But," said the speaker, (with great truth) "you can't put all people over 65 at making baskets the rest of their life!" He might as well have said "you can't put all old people at grinding and polishing rocks."

Well—a basket is a basket but a rock is a gem. The basket will decay and fall into the dust of its maker but the gem will survive somewhere as long as matter survives at all. We predict that more and more people will realize this through the coming years. They are becoming acquainted with the infinite facets of the gem cutting hobby, the complete answer to the question "what can I do with my hands?" No recreational endeavor seems to satisfy a man so completely as taking a rough rock of the field and converting it into a sparkling thing of beauty he can hold in the palm of his hand. It is about the only hobby that can satisfy the deep dream of every individual, regardless of his station in life—the unfulfilled dream of becoming an artist.

Our lives are filled with frustration over this dream. We hear a great singer and regret that we cannot sing as well; we witness great acting and regret that we cannot be the mime; we see great paintings and realize our own limitations; we hear great music and know that we cannot feel those things originally. But no man can look upon the finest gem and admire it without the knowledge today that, given the same piece of material, he can duplicate it without spending a life time learning how. A hundred years ago he could not have done it because the information on how to do it was not available. But man now has rediscovered his first art form and he is returning to it with a vengeance. And when we speak of men we also mean women for, as the editor of a lapidary magazine, we find that our subscription list is almost evenly divided between men and women. The latest available list of active members of the Los Angeles Lapidary society indicates that 51 of 179 members are women, or almost a third. And many men belong whose non-member wives are lapidaries.

Once in a while someone will say to us "don't you think this gem cutting thing will run its course in a couple more years?" No—we don't think so and we've said so now for 10 years. This gem cutting hobby is just burning along the edge of the field. Wait until it hits the brush and the timber. We do believe the mineral collecting hobby is on the wane because the supply of cabinet materials is almost depleted and collecting areas are practically non-existent. But hard rocks for polishing are so freely available in almost every state in the country that there is a limitless supply for the lapidaries of all time. With all the hue and cry about depletion any sensible person knows that there's more in the earth than has ever been taken out. Some things such as kunzite are practically gone and chrysocolla is going fast, but agatized materials, which comprise probably as high as 98 percent of all amateur cut gems, are limitless.

If you are a senior citizen, or about to become one, and you have been reading this column at times through the years but have never been bitten by the bug—investigate this thing called gem cutting. The lapidaries who follow it were looked upon as being a little nuts only 10 short years ago. Today we are regarded with great respect everywhere in the face of what we have accomplished for our happiness. Gem cutting could make you happy too, and bring fulfillment of your dream.

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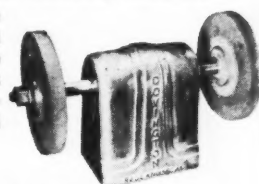
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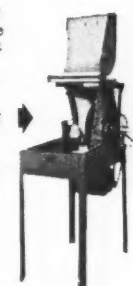
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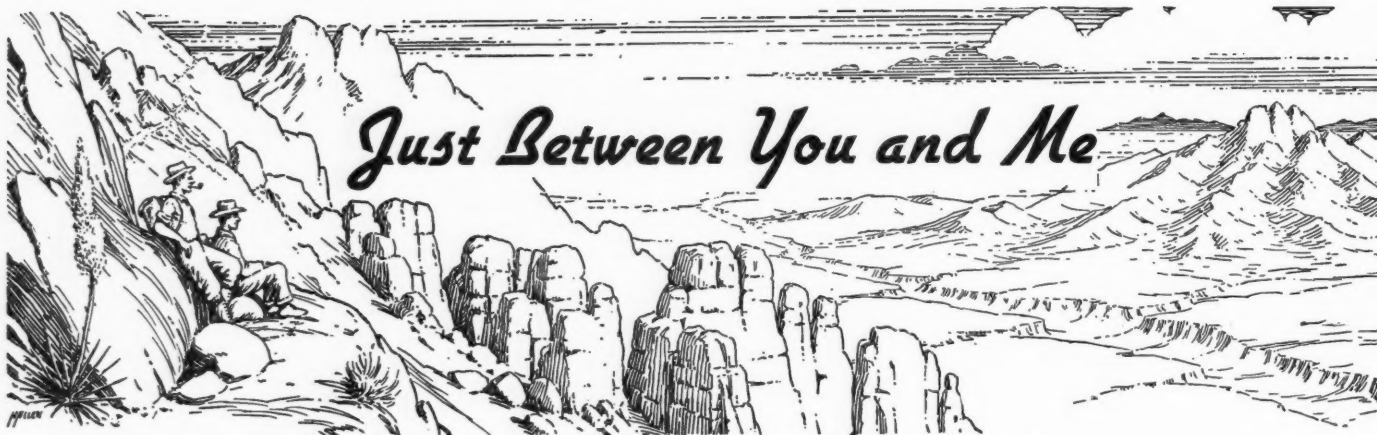
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By RANDALL HENDERSON

FOR reasons we humans do not understand, the rain gods withheld their normal allotment of showers this season, and many who came to the desert hoping to see the dunes covered with verbena and primrose were disappointed.

But while the annual plants depend on seasonal rainfall for their germination, the trees and many of the perennial shrubs burst forth in blossom each season regardless of the amount of moisture that falls from the clouds.

As this is written, early in April, the shores of Salton Sea and the wadis in desert Southern California and Arizona are ablaze with the golden plumes of palo verde, and in many places the ocotillo stalks are tipped with crimson blossoms.

This is the season when hundreds of motorists come to the desert with their bedrolls for a weekend of camping in the arroyos and the little coves at the base of desert mountains. There is plenty of dead ironwood and palo verde and smoke tree in such places for the campfire and the night air is just cool enough to make camping a delightful and stimulating experience.

Occasionally you will meet an old-timer who will tell you that it is dangerous to camp in the bottom of a wash. Sometimes this is true, but not always. It depends on the terrain, and time of year.

On the great plateau of northern Arizona where watersheds cover millions of acres and the nearest mountain range may be 40 or 50 miles away, storms in July and August sometimes send a cloudburst torrent surging down the dry arroyos many hours after the rain has ceased to fall. There is hazard in such a situation.

But over much of the Southwest one may camp safely in the arroyos if the nearby range of mountains which drain into the area have no storm clouds hanging over them. A little familiarity with the terrain, and plain common sense, will tell you when the wadis are safe for an overnight camp.

One of the most popular camping spots on the Southern California desert is the wide shallow entrance to Deep Canyon at the base of the Santa Rosa mountains less than two miles from Desert Magazine's pueblo. When the skies remain clear over the ridge of the Santa Rosas—and that is most of the time—there is no danger to campers in Deep Canyon.

One of the groups which came to Deep Canyon this year was the Spectrum Club of Long Beach, California. It is composed of business and professional men whose avocation is art. Some of them have won recognition for their paintings, but for the most part the organization is com-

posed of amateurs who sketch and paint and take pictures for their own and the enjoyment of their friends.

They camped among the palo verdes for several days and spent their vacation hours sketching the landscape. Paul Lauritz, one of the best known among Southwestern artists, visited their camp one afternoon and gave a demonstration of his field sketching technique. Paul is a master with big brushes and in an hour's time had completed a colorful field sketch of a Santa Rosa landscape. He must have sensed my admiration for the artistry of his work, for the sketch now hangs in my editorial workshop—his gift to the Desert Magazine.

According to a recent statement of William E. Warne, assistant secretary of interior, the Indian population in the United States during the last 50 years has increased from around 200,000 to approximately 400,000, and "is the fastest growing segment of our population."

All of which is evidence that on the physical level the native population of North America has adapted itself to the white man's civilization. It is not entirely the fault of the Indian that on the economic level he has so far failed to make the adjustment, although most sociologists agree that he has the capacity to do so.

In the economic world the tradition of the tribesman was and still is to a large extent directly opposed to that of the white man. In the tribal life of the Indian the economic principle was cooperation. No tribesman went hungry when there was food in the camp. In the white man's economy the cooperative tradition of the ancients has given way to a fierce claw and fang competition, with the result that while one segment of the population goes hungry another segment is destroying surplus food.

I suspect that the reluctance of the Indian to enter the competitive arena with the white man is not due entirely to stupidity. Perhaps he has grave doubts as to the ultimate survival of an economic pattern in which one segment of the population amasses wealth beyond any possible need, while another segment remains in poverty. Many liberal-minded Anglo-Americans have similar doubts.

This could not happen under the cooperative rule of the ancient tribesmen. Perhaps they had something that we have yet to learn. But if it should appear desirable to modify our highly competitive economy we should keep clearly in mind that true cooperation can be accomplished only by voluntary action, not by governmental edict. The Russians are trying out the formula of forced cooperation—and we Americans do not think much of it.

In other words, our problem is one of better education—not of more government.

BOOKS OF THE SOUTHWEST . . .

A CENTURY OF BAD MANAGEMENT

The history of our government's relations with the Indians of the Southwest has been a story of neglect and broken treaties. The mismanagement started when the Indian Country was acquired from Mexico in 1848, and although there has been improvement, federal relations with the First Americans are still open to criticism.

When the United States took over the vast region ceded by Mexico following the Mexican war, it acquired not only desert and mountains—for which it paid a treaty price—but also acquired a sovereignty over thousands of Indians of many tribes with varied customs, religions and living in various stages of civilization. Some were peace-loving, like the Pueblo Indians of New Mexico, some were more war-like. The Apache and Navajo tribesmen were accustomed to raiding their Indian and Mexican neighbors and fiercely resented the white man's intrusion.

In *The Indians of the Southwest* Edward Everett Dale has compiled a detailed history of federal relations with southwestern Indians. He takes the various states included in the Mexican cession one by one and traces the history of the government's faltering attempts at improving the Indians' situation. It is not a critical treatment, but a report of documented facts. Extenuating circumstances are cited along with the disgraceful instances. Distance from the seat of government in Washington, lack of communications, newness of the problem are pointed out.

The book is concluded with a summary of present-day problems and what is being done to solve them. For those who would like to understand today's Indian problem, this history of what created the problem is important background material.

Published by the University of Oklahoma Press, Norman, Oklahoma, 1949. 260 pp, plus 32 illus., 5 maps, biblio. and index. \$4.00

Arizona Pioneer's Historical Society has announced the publication of *Campaigns in the West* in which are presented the heretofore unpublished journal and letters of Col. John Van Deusen Du Bois with the pencil sketches of the artist Joseph Heger, both the writer and the artist having played leading roles in the early exploration of the West in 1850 to 1861. Only 300 copies of the portfolio have been printed by the Grabhorn Press of San Francisco. Priced at \$60 a copy.

JOHN BIDWELL'S ROLE IN EARLY CALIFORNIA

It might be said that John Bidwell was the first chamber of commerce type California booster—except that such a statement would not be doing justice to this pioneer of high integrity and lofty ideals. But he was the first to promote good roads; the first to establish an experimental farm; the first to make surveys of county lines. He came from Missouri to California before the Gold Rush days, and for half a century influenced development of the Empire State of the Pacific through every stage of its growing pains.

Although fundamentally a man of peace, Bidwell took an active part in the movement to win California from Mexico. His was a stabilizing influence in the hectic years that followed. He came into national prominence as presidential candidate for the Prohibition party in 1892. His was a full life until his death in 1900. The story of that life is told by Rockwell D. Hunt, historian and author, in *John Bidwell, Prince of California Pioneers*.

Published by The Caxton Printers, Ltd., Caldwell, Idaho. 433 pp plus index, biographical notes, selected documents. Illustrated. \$5.00.

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Latest travel book in the Scenic Guide series written by Weldon F. Heald and published by H. Cyril Johnson is the *Scenic Guide to California*, just off the press. Guides to Utah, Arizona, Nevada, New Mexico and

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For those seeking a better acquaintance with the reptiles of the desert world *An Illustrated Key to the Lizards, Snakes and Turtles of the West*, has been published by the Naturegraph company of Los Altos, California. It is a 32-page pocket manual, paper bound. The little book is well illustrated with line drawings and gives both scientific and common names of the reptiles one is likely to encounter west of the Rocky mountains. 50c.

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Story of the Coyote . . .

The story of a coyote written by Loyd Tireman and beautifully illustrated by Ralph Douglass is the latest book in the Mesaland series published by the University of New Mexico Press for juvenile readers. The coyote lost part of his toes in a trap and thereafter was known among the cattlemen as "3 Toes" and this is the title of the book. A delightful little story showing the cunning of one of the smartest denizens of the desert. 50 pp, \$1.25.

Meet the Giant Cactus is the title of a 21-page paper-bound book written about the saguaro cactus by Elsie Haynes of Denver, Colorado. The book is non-technical. Published by the author. 50 cents.

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